

# A Case Study of Government Ration During Covid-19

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**Abstract-** Ration is a method of distribution of essential commodities to a large number of people. It is completed by the government public distribution system of the widely controversial officers that involves corruption and illegal of goods. It is a new concept which take into account the various social. Economic and general aspects relating to technical as well as day to day behaviours. This project aims to explore food insecurity among people from the limitation community and very low-income poor families during the covid-19. The study suggests that the relief support plan and policies should be concentrate on the specification of immediate sustainable product security strategies to prevent hunger, malnutrition and physical and mental health problems relate the most variable vulnerable groups in the rural and urban communities.

## I. INTRODUCTION

Indian food security system of the government of India under minister of food and public distribution food and non-food to India's middle class and poor people. The scheme was launched in India in June 1997. Public distribution system is an Indian food security system in the country which insures the supply of food grains and distribution of required commodities to a high number of very poor people in the country. It was established by the government in India for deal out food and non-food items to India's poor through a network of public distribution shop. It is managed by the Union Government (Ministry of consumer affairs food and PDS) and the State Government. It applicable across the country and is for the Welfare of the people. It distributed include like such staple food grain such as wheat, rice, sugar and kerosene. Food corporation of India, a government entity, manager the Public distribution system. It is both central and government shared the responsibility of regulating the PDS.

### Objectives of the study:

- Ensuring the details on how the people had adapted with ration cards.
- To study the difference in ration shop and retail shop.
- Controlling the price rise of essential commodities in the open market.
- To attempt socialization in the matter of distribution of essential commodities.

- To identify the influence of different factor related to the covid-19 pandemic on changes in Individual consumption of Government ration item.

### Statement of the problem: -

The statement of the problem has lots of meanings and express a desire to know the usefulness and the performance process of PDS scheme. Ration shop are spread out by the Government to fulfil the basic food grains for every people among the country. It decreases food insecurity and also helps the poor people to buy all basic things like rice, oil, kerosene, wheat and sugar, etc., at a very low price.

## II. REVIEW OF LITERATURE

[1] **IFPRI(International food policy research institute)** The study of 'preventing global food security crisis under covid-19 emergency' article by IFPRI the outbreak is showing a new trend. While the situation in china has improved dramatically, several countries, especially the Republic of Korea, Japan, Italy and Iran have been reporting more new cases. According to the untied nation food and Agriculture Organisation more than 820 million people across the globe are already suffering from hunger, although the Chinese number reported by FAO is grossly overestimated.

[2] **Bhaskar Majumder (2009)** In the case study of political economy of Public Distribution System in India author is Bhaskar Majumder (2009) National food self-sufficiency by production and presence of food in the economy, or in the market, does not automatically ensure food security of the poor unless it is accompanied by the functioning distribution system.

[3] **Pallavi Pathak (2020)** The case study of effect COVID-19 on public distribution system in India author by Pallavi Pathak, The COVID-19 pandemic has caused the whole world to face economic crisis and hence putting people even more at risk of food insecurity. We have discussed the importance of macrolevel thinking and various measures that can be taken to strengthen PDS in India.

[4] **Naba Kishor Pujari** The study of COVID-19 Centre must make food grain distribution universal by the food safety and

standard authority of India (FSSAI) said in an order dated February 24,2020 that containers of non-packaged loose sweets at shops should display the date of manufacturing of the product and before which date it should be consumed. State of food security and Nutrition in the world (SOGI) report 2020.

[5] **Serpil Aday, Mehmet Seekin Aday** The case study of impact of COVID-19 on the food supply chain. A pandemic is not a new event encountered in the history of humanity because mankind has faced various pandemics in history. The common point of pandemics is their serious negative effects on the global economy. Considering the food supply chain, one of the most important sectors of the economy, it has been seen that COVID-19 has an impact on the whole process from the field to the consumer.

**III. RESEARCH METHODOLOGY**

❖ **Research Area:**

The study was carried out in Coimbatore City, Tamil Nadu. Area of the study refers to the Coimbatore city in which is the Manchester of south India. Coimbatore city is one of the top ten fastest growing cities in India and the second largest city in Tamil Nadu.

❖ **Sampling Method:**

Convenience Sampling is the method used to collect the data from the respondents by Questionnaire. The study uses only primary data. For the purpose of collection of data. The questionnaire has been prepared and data were collected from the Coimbatore City.

❖ **Sampling Size:**

Sampling size taken in this is 115 respondents.

**Limitation of study:**

- The study is limited to Coimbatore city. So, the findings and results are confined to a limited area.
- The respondent of this research is 115 only.

**Tools used for analysis:**

- Chi-Square test
- Percentage Analysis

**IV. ANALYSIS**

**Percentage Analysis**

**Age**

S No	Age	No of respondents	Percentage
1	18-20	45	39.13
2	20-30	43	37.39
3	31-40	18	15.65
4	41-50	9	7.82
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - Primary data

**Interpretation: -**

From the analysis, it shows that 39.13Per cent respondents are in age of 18-20 years 37.39Per cent respondents are in age of 20-30 years, 15.65Per cent respondents are in age of 31-40 years, 7.82Per cent respondents are in age of 41-50 years, thus, the majority of respondents are in the group of 20-30 years.

**Gender**

S No	Gender	No of respondents	Percentage
1	Male	74	64.3
2	Female	41	35.7
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - Primary source

**Interpretation: -**

From the analysis, it shows that 64.3Per cent respondents are male, 35.7Per cent respondents are female, thus, the majority of respondents are male.

**Marital Status**

S No	Marital status	No of respondents	Percentage
1	Married	21	21.7
2	Unmarried	94	78.3
3	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary source

**Interpretation: -**

From the analysis, it shows that 21.7Per cent respondents are married, 78.3Per cent respondents are unmarried, thus, the majority of respondents are unmarried.

#### Monthly income

S No	Monthly income	No of respondents	Percentage
1	Less than 10,000	49	42.6
2	10,000-20,000	33	28.7
3	20,000-30,000	22	19.1
4	More than 30,000	11	9.6
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary data

#### Interpretation: -

From the analysis, it shows that 42.6Per cent of respondents are less than 10,000, 28.7Per cent of respondents are 10,000-20,000, 19.1Per cent of respondents are 20,000-30,000, 9.6Per cent of respondents are more than 30,000, thus, the majority of respondents are less than 10,000 income.

#### How many members in your family?

S No	Members	No of respondents	Percentage
1	2-4	63	54.8
2	4-6	31	27
3	6-8	17	14.8
4	More than 8	4	3.5
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary data

#### Interpretation: -

From the analysis, it shows that 54.8Per cent of respondents are 2-4, 27Per cent of respondents are 4-6, 14.8Per cent of respondents are 6-8, 3.5Per cent respondents are more than 8. Thus, the majority of respondents are 2-4 family members.

#### Have you got a “smart card” for ration purpose?

S No	Have you got a smart card	No of respondents	Percentage
1	Yes	104	90.4
2	No	11	9.6
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary data

#### Interpretation: -

From this analysis, it shows that 90.4Per cent of respondents are having smart card, 9.6Per cent of respondents are not having smart card. Thus, the majority of respondents are having smart cards.

#### Which type of ration card do you have?

S No	Items	No of respondents	Percentage
1	All	72	62.6
2	Sugar and others	23	20
3	No	20	17.4
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary data

#### Interpretation: -

From this analysis, it shows that 62.6Per cent of respondents are all commodities, 20Per cent of respondents are sugar and other (no rice), 17.4Per cent of respondents are commodities. Thus, the majority of respondents are all commodities.

#### Is the ration shop near your house?

S No	Is the ration	No of respondents	Percentage
1	Yes	91	79.1
2	No	24	20.9
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary data

#### Interpretation: -

From this analysis, it shows 79.1Per cent of respondents are ration shop near house, 20.9Per cent of respondents are not ration shop near house. Thus, the majority of respondents are ration shop near house.

#### How frequently do you visit the ration shop for purchases?

S No	Duration	No of respondents	Percentage
1	Two	72	62.60
2	Quarterly	23	20
3	Monthly	20	17.39
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary data

**Interpretation: -**

From this analysis, it shows 62.60Per cent of respondents are two monthly once purchases, 20Per cent of respondents are quarterly purchases, 17.39Per cent of respondents are monthly purchases. Thus, the majority of respondents are two monthly once purchases.

**Have you bought any items on schemes issued by the government/ festival item?**

S No	Items on schemes	No of respondents	Percentage
1	Always	46	40
2	Not always	24	20.9
3	Rarely	30	26.1
4	Never	15	13
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary data

**Interpretation: -**

From this analysis, it shows 40Per cent of respondents are always, 20.9Per cent of respondents are not always, 26.1Per cent are respondents are rarely, 13Per cent are respondents are never. Thus, the majority are respondents is rarely.

**In the item bought, which one cost the maximum**

S No	Items	No of respondents	Percentage
1	Rice	27	23.5
2	Kerosene	21	18.3
3	Sugar	44	38.3
4	Wheat	23	20
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary data

**Interpretation: -**

From this analysis, it shows 23.5Per cent of respondents are rice, 18.3Per cent of respondents are kerosene, 38.3Per cent of respondents are sugar, 20Per cent respondents are wheat. Thus, the majority are respondents is sugar.

**Have you had an experience of registering a complaint for being supplied with quality of goods?**

S No	Had an experience of registering Complaint	No of respondents	Percentage
1	Yes	66	57.5
2	No	48	42.1
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary data

**Interpretation: -**

From this analysis, it shows 57.7Per cent of respondents are yes, 42.1Per cent of respondents are no. Thus, the majority are respondents is option of yes.

**When comparing the cost of ration items with that of retail store which place is more expensive?**

S No	Which place is more expensive	No of respondents	Percentage
1	Always retail	36	31.3
2	Always ration	22	19.1
3	Keep fluctuating	18	15.7
4	None	39	33.9
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary data

**Interpretation: -**

From this analysis, it shows 31.3Per cent of respondents are always retail shop, 19.1Per cent of respondents are always ration shop, 15.7Per cent of respondents are keep fluctuating frequently in both places, 33.9Per cent respondents are none. Thus, the majority of respondents are none option.

**Do you prefer ration shop or retail shops for purchase?**

S No	Which do you prefer	No of respondents	Percentage
1	Retail	81	70.4
2	Ration	34	29.6
	<b>Total</b>	<b>115</b>	<b>100</b>

Source: - primary data

**Interpretation: -**

From this analysis, it shows 70.4Per cent of respondents are retail shop, 29.6Per cent of respondents are ration shop. Thus, the majority of respondents are retail shops.

**V. CHI-SQUARE TEST**

**Association between age and how frequently do you visit the ration shop for purchases**

**Hypothesis:**

**H<sub>0</sub>:** There is no significance relationship between Age and How frequently do you visit the ration shop for purchases.

**H<sub>1</sub>:** There is a significance relationship between Age and How frequently do you visit the ration shop for purchases.

6 cells (50.0Per cent) have expected count less than 5. The minimum expected count is 78.

**Interpretation:**

Since the significant value is less than the prescribed value the null hypothesis is rejected and an alternate hypothesis is accepted.

**H<sub>1</sub>:** There is a significance relationship between Age and How frequently do you visit the ration shop for purchases.

**Association between how many members in your family and which type of ration card do you have**

**Hypothesis:**

**H<sub>0</sub>:** There is no significance relationship between Family members and Which type of ration card do you have.

**H<sub>1</sub>:** There is significance relationship between Family members and Which type of ration card do you have.

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.371 <sup>a</sup>	6	.078
Likelihood Ratio	10.900	6	.092
N of Valid Cases	115		

5 cells (41.7Per cent) have expected count less than 5. The minimum expected count is 70

**Interpretation:**

Since the significant value is higher than the prescribed value the hypothesis is rejected and an alternatively, null hypothesis is accepted.

**H<sub>0</sub>:** There is no significance relationship between Family members and Which type of ration card do you have.

**Association between Monthly income and Do you prefer ration shop or retail shops for purchase?**

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.053 <sup>a</sup>	6	.004
Likelihood Ratio	17.541	6	.007
N of Valid Cases	115		

**Hypothesis:**

**H<sub>0</sub>:** There is no significance relationship between monthly income and do you prefer of ration shop or retail shop for purchase.

**H<sub>1</sub>:** There is significance relationship between monthly income and do you prefer of ration shop or retail shop for purchase.

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.217 <sup>a</sup>	3	.239
Likelihood Ratio	4.584	3	.205
N of Valid Cases	115		

All cells 12.5 Per cent have expected count less than 5. The minimum expected count is 3.25

**Interpretation:**

Since the significant value is higher than the prescribed value the hypothesis is rejected and an alternatively, null hypothesis is accepted.

**VI. FINDINGS**

- 21.7Per cent of respondent are married.
- 9.6Per cent of respondent are monthly income of more than 30,000
- Majority of people using ration card.
- Majority of people purchase in retail shop.
- Majority of people buying sugar in ration shop.
- Most of respondent are from the student and employee.
- Minority of the people does not have ration card.
- 62.6Per cent of respondents are all commodities.
- 79.1Per cent of respondents are yes of the ration shop near house.
- 62.60Per cent of respondents are two monthly once of visit the ration shop.
- 40Per cent of respondents are always items on schemes issued by the government.
- 38.3Per cent of sugar item bought cost the maximum
- 57.5Per cent of respondents which have experience of registering complaint.
- 70.4Per cent of respondents are prefer the retail shop for purchase

**Chi square test:**

- There is a significance relationship between Age and How frequently do you visit the ration shop for purchases.
- There is no significance relationship between Family members and Which type of ration card do you have.

- There is no significance relationship between monthly income and do you prefer of ration shop or retail shop for purchase.

**VII. CONCLUSION**

This research paper presents an assessment of COVID-19 implications on public distribution of system with reference to the specific case of Coimbatore in Tamil Nadu. The purpose of the study was understanding the chronological of this case. The supply of chain should respond and overcome the challenging situation in the food supply chain. It is a critical resource for the food system of the poor people, especially the poor and particularly women who manage household food supplies. This proposed method can provide a safe, secure and efficient way of ration distribution in covid-19 and they follow the rules and regulations of government ration.

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