

## THEORIES ON FOOD SECURITY: A CASE EVIDENCE FROM KERALA

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### Abstract

*The importance of food in modern times has been widely accepted. Because, it is a shocking and alarming fact that every seventh person universally and every fifth person in the developing parts of the world are hungry today. To avoid this crucial situation the Government of India introduced various welfare programmes on food in which Public Distribution System (PDS) is one of the largest food subsidy programmes in the world that protects the food safety measures in India. The main benefit of food subsidies is the assurance of food security at affordable prices to the people, mainly the poor. In this paper two well-known economic theories are used to analyze the influences of PDS scheme for the need of food security. The study revealed that, PDS scheme plays a vital role in reducing the global hunger levels of India especially in Kerala and ensure the basic 'right to food' to all at subsid prices and also at free of cost to the possible extent.*

**Keywords:** *Public Distribution System, Individual Deficiency, Food Consumption Score*

### Introduction

As per the Global Hunger Report (2017), India ranked the 100<sup>th</sup> position among 119 countries in the world report, 38.4 percent of children under the age of five in India are stunted and 51.4 percent of women in reproductive ages are anemic. Close to 800 million people worldwide still suffer from hunger and are unable to consume enough food to conduct an active and healthy life, In addition to acute hunger, 2 billion suffer from micronutrient deficiencies, and 60 percent of individuals in under developed countries are food-insecure (Rafael Perez, 2017). In India, around 270 million poor people are living in poverty who are not even able to fulfill their basic needs as per 2012-2013 estimates of Planning Commission. According to 2011 Census, in case of Kerala, 52.3 percent population live in rural regions and 47.7 percent live in urban regions. In Kerala, from 1973-74 to 2011-12, rural and urban poverty ratio declined from 59.19 per cent to 7.3 per cent and from 62.74 per cent to 15.3 per cent respectively (Economic Review 2016).

The Right to Food is one of the basic human rights which are closely linked to the Right to Life under Article 21 of the Constitution of India. Articles 38 and 47 of our constitution protect every Indian citizen's right to food security. Food security touches all the dimensions of human security i.e., economics, social relations, health, community development and structures of political power, the environment and all the development. Rising population growth along with the unpredictable consumption patterns in India have increased the demand for food ever since Independence. Food security exists when all people at all times have physical and economic access to sufficient, safe and nutritious food that meet their dietary needs and food preferences for an active and healthy life. Jerome K Jerome, in a delightful essay on "Idle thoughts of an idle fellow", said that kitchen is the temple of God and Cook the high priest. Food as an icon of foremost Divine concept is present in almost all major religions. The importance of food in modern times has been widely accepted. Because, it is a shocking and alarming fact that every seventh person universally and every fifth person in the developing parts of the world are hungry today.

In these situations, it will break the development and sustainability of the country. To avoid this crucial situation the Government of India introduced various welfare programmes on food, education, health, and infrastructure and so on. So, Government came up with a subsidy, which further lowered down the price of the product within the extent of poor people. These subsidies target a goal that is to turn poor class people to a medium class population. To ensure that everyone get food, various subsidies were introduced by the Indian government and among all, Public Distribution System (PDS) is one of the largest food subsidy programmes in the world that protects the food safety measures in India. The main benefit of food subsidies is the assurance of food security at affordable prices to the people, mainly the poor. Here the PDS had an oblivious relationship with antipoverty issue because only such a system can have the infrastructure to deliver essential commodities to meet their minimum food requirements of poor household, and by to break the vicious cycle of poverty forever. Over the years, the Department's expenditure on food subsidy has increased, as a results, the ratio of people below poverty line has reduced. In 2017-18, out of the center's total expenditure on subsidies, 52% was spent on providing food subsidy (Varma, 2017).

### Review of Literature

**Suryanarayana (2001)** examined PDS implications on food security in Kerala. The study found that the system has promoted economic access by providing food grains at subsidized prices. **Nirankar and Amaresh (2010)** pointed out that PDS plays a relatively more important role in food security of the households rather than poverty reduction. **Kannan and Dev (2000)** in their paper noted that, the present PDS exists in meaningful form only in several states. The Kerala experience highlighted the advantage of universal PDS. It has ensured both physical and economic access and has sought to provide an entitlement of food-grains which is close to 90 per cent of the requirement. Working paper of **Shruthiet.al. (2008)** attempted to study the PDS system in Kerala. The study found that the annual purchase of grain from the PDS in Kerala provides about one half of the cereal requirements of a person. **Kasim (2012)** attempted to analyse food security and nutritional problems in Kerala by examining both supply side and demand side factors. The study found that nutritional status of men and women in the state is found to be better and the incidence of undernutrition among children has declined. **Suri (2014)** studied the efficiency of PDS to provide food security to the poor people. The study exposed that, at present the system has a clear relationships with the anti- poverty issues and by this scheme meet the needs of the poor hunger people and helps to reduce the market prices of food grains.

### Objective and Methodology of the Study

The study is based exclusively on Primary data. To collect Primary data, Multistage Purposive Sampling technique has been used and personal interview method was adopted. In total three panchayats have been chosen for the present study. That was on the basis of concentration of BPL SC, BPL ST, and APL categories. Based on this from AAY category 10 per cent of PDS card households, from AAY 10 per cent and from BPL 3 per cent were selected. Thus about 485 households have been selected for the survey. In this paper two well-known economic theories are used to analyze the influences of PDS scheme for the need of food security and in turn how it touched human development among the people in Kerala.

### Individual Deficiency Theory

According to the individual deficiency theory, the main reason for poverty among individuals is their own personal characteristics such as laziness, insufficient hard work, low intelligence, and lack of skills, low educational attainments and some of the inferior manners. The theory says further that the chance of poverty varies and this depends upon age, gender, family structure, health, economic conditions, and geographical features and so on. These factors are pushing the

people in a life-threatening situation and create it difficult for them to outflow deprivation or to reach their complete human developments. To overcome these deficiencies, people who suffer these situations need education, constructional training of their skill, hard work, motivation, well-paid job, policies and assistance that should be in the form of services and goods, etc. The theory gives importance to policies, various poverty programmes and methods to overcome their deficiencies, through which to help them to set work as their primary goal. The approach of individual deficiency theory of poverty in a practical way can help to overcome the barriers of the theory by providing public assistance through services and goods instead of cash. Thus a proper implementation of PDS system extends its scope thereby stimulating people to overcome their basic need of resources triggering to achieve a physical wellbeing.

Individual-level anti-poverty programmes have a social component; however, firstly, a reliable safety net that can help people who are otherwise not able to help themselves is really a public duty. These deficient people are part of the society; therefore instead of blaming them, their individual needs should be met by anti-poverty programmes and schemes. With this objective, PDS is also very much important among the various other poverty alleviation programmes. Deficiency in the form of low income, unhealthy people, low economic status and assets, people who live in poor and miserable geographical situations is due to many factors but a minimal amount of possessions provided can be an inducing factor to raise the standard of living. So in this situation along with the various poverty schemes, PDS is very much important factor to meet the basic needs. With a fruitful scheme, PDS can transform these deficient people into productive people by motivating them to work and improve their economic status. It helps them to keep up good health standard and which in turn can overcome their physical barriers to work for a better living. Thus, in effect, these people become profitable and useful persons in socio-economic society. As food security is a combination of proper availability, affordability, accessibility and utilisation of food in a defined population, any barriers to these four components can be valued as a deficiency leading to poverty that fails to ensure proper living status. Thus, the shortage to satisfy any of the factors can also create an individual deficiency which in a way can be resolved through proper Public Distribution System.

### **Malthusian Optimism**

The Theory of Population is the eminent theory of population by Thomas Robert Malthus. He vocalized his views about population in his famous book, 'An Essay in the first principle of population' as it shakes the coming enhancement of society, published in 1798. In it, he narrates his visions on the effects of population over food supply and also he states that human population have a tendency to grow faster than the power to produce subsistence in the earth. In other words population multiplies geometrically and food arithmetically. It means food supply upsurges in a slow ratio and population itself rises in a rapid ratio. By nature, human being is rational and he tries to maximize his welfare and profits; but to satisfy his unlimited wants with limited resources are impossible. Therefore, he is worried about the poor, particularly those who have affected by rural poverty. In the opinion of Malthus, an upsurge of population than the food supply would terminate the perfection and there would be misery, poverty and famine in the world. In this way, the theory explains the relationship between the growths both in food supply and in population. The theory states that population increases faster than food supply and if we do not check or control the infinite growth of population it constructs negative disparities in the society. Therefore the supply of essential food articles at subsidized rate is efficient and practical to eradicate food deficiency. The importance of PDS is seen in this context to avoid these insecurities as a scheme of equal distribution of resources. PDS is an Indian food security system and intimately linked with the policy of anti-poverty programmes so that, it as an integral part of food policy for protecting the poor.

According to Malthus, food is an indispensable requirement in the life of a man and the inevitably should be limited by the means of supply where PDS becomes an applicability. Fortunately, through the PDS, the government tries to balance the availability of food grains among the people (who are deprived of the possibility of producing food grains for their livelihood and the people who owns food grains). As the second populated country in the whole world, the supply of resources especially the food grains (that is one of the basic element of human existence) to the entire inhabitants is necessary for a countries development. With the proper implementation of PDS system, it can reduce poverty, famine, hunger and epidemics which can be a helping hand for the poor.

**Table 1 Determinants of Food Security based on Seven Days Food Consumption based on the purchase from PDS, Open Market and Both**

SL.NO	FCS Thresholds	PDS Dependence			Open Market Dependence			Both Dependence		
		BPL	AAY	APL	BPL	AAY	APL	BPL	AAY	APL
1	Poor(0-21)	63 (22)	11 (15.1)	102 (81.6)	80 (27.9)	66 (90.4)	8 (6.4)	0 (0.00)	0 (0.00)	0 (0.00)
2	Borderline (21.5-35)	206(71.8)	38(52)	22(17.6)	205(71.4)	7(9.6)	53 (42.4)	2(0.7)	22 (30.1)	0(0.00)
3	Acceptable (Above 35)	18 (6.2)	24 (32.9)	1 (0.8)	2 (0.7)	0 (0.00)	64 (51.2)	285 (99.3)	51 (69.9)	125 (100.0)
	Total	287 (100)	73 (100)	125 (100)	287 (100)	73 (100)	125 (100)	287 (100)	73 (100)	125 (100)

Table 1 explains about the Food Consumption Score (FCS) of the selected three groups of sample households based on their food consumption requirements; they are consuming food articles from the PDS or open market or from both. FCS is an index that is developed by the World Food Programme (WFP). Here the FCS thresholds are classified in to three categories. Based on these categories, the researcher determines whether they are food secured, or whether they belong to mildly food insecure or severely food insecure.

A glance at the table 1, based on the sample households seven days food requirements reveals that, if the BPL category consumes food articles from PDS alone, then majority (71.8%) of the households belonged to the borderline, and for the AAY it was 52 percent, and for APL it was 17.6 percent. which means they were in the stage of slightly insecure. Also, 6.2 percent from BPL households, 32.9 percent from AAY, and 0.8 percent from APL were satisfied with the available food articles from the PDS, It means they are in the stage of the acceptable condition. They come under the category of food secured people. In the view of individual deficiency theory, the key cause for poverty among individuals is their own personal characteristics and to overcome these deficiencies, people who suffer these situations need education, hard work, motivation, well-paid job, policies and assistance that should be in the form of services and goods, etc. In this study, it revealed that PDS thus is an unavoidable factor to reconcile the deficiencies addressed in individual deficiency theory of poverty. Thus a proper implementation of PDS system extends its scope thereby stimulating people to overcome their basic need of resources triggering to achieve a physical wellbeing.

A look at on the above table, based on sample households seven days food requirements reveals that the consumption score from PDS for the poor was 63 and for AAY it was 11and for APL it was 102 out of 485 households. This means they are not able to get enough food articles from the PDS to meet their consumption and in which they belong to severely food insecure stage. In the opinion of Malthus, an upsurge of population than the food supply would terminate the perfection and there would be misery, poverty, and famine in the world. Further, the theory

states that population increases faster than food supply and if we do not check or control the infinite growth of population it constructs negative disparities in the society. In the current study, it shows that, if population increases faster than food supply and if we do not check or control the infinite growth of population it constructs negative disparities in the society.

The present table clarifies that, for the improvement of consumption pattern of the sample households, they have to rely on open market. If the surveyed households depend only on open market for their food consumption, then 27.9 percent from BPL, 90.4 from AAY and 6.4 per cent from APL they fell under severe food insecurity; 0.7 percent from BPL and 51.2 percent from APL were satisfied with the available food articles from the open market. It means they were at the stage of acceptable condition. They come under the category of food secured people when they are consuming only from the open markets. If all the three categories of households are consuming from the PDS and the open market, there are no food in-secured people in the selected households that means no poor category. In the study, 24 households are in slight food insecure stage and 461 households are food secured, also there is no one in the stage of poor category. So it is concluded that for the food consumption and for the eradication of poverty, both PDS and open market are necessary for the people. So from the above evaluations it can be concluded that PDS system is considered as a strong weapon in the hands of the Government for providing food and non-food items to the poor and the oppressed.

## Conclusion

To conclude, the role of Public Distribution System in ensuring food security to the poor people in India is vital. Public Distribution System promises food for all at all times. It helps to eradicate the absolute mass poverty and lays the foundation for the growth and development of the society. In nutshell, PDS scheme plays a vital role in reducing the global hunger levels of India and ensure the basic 'right to food' to all at subsides prices and also at free of cost to the possible extent. It helps to eradicate absolute mass poverty and lays the foundation for the growth and development of the society.

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