Chapter-II

REVIEW OF LITERATURE

The review of literature is a prime and significant part of any research work. This chapter is devoted for a review of earlier studies on public distribution system. The foregoing review makes an effort to throw sufficient light on various aspects involved in the implementation of public distribution system along with the possible impact by the system on the consumers. The review deals with sustainable development, food security, food policy, food subsidy, procurement of food grains and functioning of PDS shops.

Mallik (1974) study in the Puri district of Orissa reveals that net distributive cost of common rice from 1967-8-68 to 1970-71 varied within a rupee per quintal on an average. But the total profit margins of various intermediaries from the producer to the consumer were quite substantial. Both the net distributive cost and the profit margin taken together come upto Rs.45 per quintal of common rice, on an average in the private distributive channel during the said period from 1967-68 to 1970-71.

Sen (1976 &1981) had shown the futility of the FAD approach and rejected it completely although it held a pre eminent position in the government’s theory of food crises. Sen observed that like the phoenix the FAD theory arose and rejuvenated from the ashes and it can be found today chirping in the current literature in the food crises of the world. Sen believed that the entitlement approach to the accessibility problem of food should be considered analytically superior to the FAD approach. The PDS is an example of what Sen termed state transfer entitlement. Sen theorized that often food crises resulted
from the failures of entitlement relations of various kinds. The present day PDS could be considered as an example of Sen’s entitlement relation.

Kikuchi, Dozina and Hayami (1978) studied on the type and functions of a program specific activities, community participation and decentralization to local government levels in planning and implementation are vital for achieving distributional benefits and long term viability. They argue that the local participation seems to be of paramount importance for the labour based development of community level infrastructure that enhances food security both directly and indirectly. The selection of appropriate method for bringing about such participation can clearly affect opportunities for participatory in organization of community works programs.

Tomas (1978) quoted that higher incomes are associated not only with a larger quality of food consumption but also with a more varied and as most nutritionists would agree with an improved nutritional quality of food consumption. The Indian data illustrate that if it were possible to increase the income of the ‘lower poor’ to the level of the “poor,” this would not only lead to a substantial increase in the consumption of food grains but also to an even larger increase in the consumption of other foods and thus an improved quality of nutrition.

Amte (1980) examined the PDS of the agriculturally predominant but persistently food deficit state of Maharashtra. The Quantum and the determinants of demand for food grains, nutritional status, population trends and trends in the income levels in the state were analyzed. Taking 2250 calories as the minimum requirement, per capita per day the gaps between the requirement level and that of the actual consumption during 1963-64 were estimated both for the urban and rural population separately. Amte found clear gaps between the required and the actual consumption which started increasing over the years
mainly due to population growth in state income and the state per capita income and the declining cereals production.

George (1980) analyzed that by using various rounds of the NSS data for the period 1961-62 to 1973-74 and examined the structural changes in the consumption patterns at the all India level and their policy implications. In the rural areas, the per capita monthly consumption of all cereals declined from 17.53 Kgs in 1961-62 to 15.09 Kgs in 1973-74 – a fall of 13.9 per cent. During the same period in the urban areas it declined from 12.7 Kgs to 11.32 Kgs, a fall of 9.2 per cent in both the areas, the fall in the total cereal consumption was the net result of a decline in the consumption of rice, jowar and other cereals and an increase in the consumption levels of wheat and bajra. The consumption of coarse grains also declined from 34.9 per cent share in 1961-62 to 30.9 per cent in 1973-74 in the rural area. For the corresponding period, it declined from 17.9 per cent share to 14.3 per cent in the urban areas.

Streeten (1981) examined that economic development theory offered but little guidance in regard to employment strategies for reducing poverty by providing for basic needs were pursued at best – parallel to growth-oriented concepts, or were even seen as competing with them. Employment consideration did play role in the development strategy debate, however, within the context of the analysis of the food and agriculture sectors key role in the development process.

Visaria (1981) studied that a priori a major source of food in security could be hidden in the employment situation faced by these households. Thus it should be interesting to examine empirically the relationship that may exist between household employment and levels and patterns of consumption. If these are found to be casually
related as posed above, one would expect households with lower and / or more fluctuating employment to be more susceptible to food insecurity and poverty.

Prigman (1985) examined that the rise in the market price and the fall in the subsidized price with a rise in the subsidy rate are the very changes that enable the program to achieve the designed redistribution of the available food supply. The rise in the market price forces the non-beneficiary consumers to give up some of their food consumption, whereas the fall in the subsidized price allows the poor consumers to increase their consumption. Reutlinge, (1985) in his study argues that world has ample food; global food production has grown at as ever faster rate than the unprecedented population growth over the 40 years. The hundreds of millions of poor people do not share in this abundance. They suffer from a ‘lack of food security’ mainly caused by a lack of purchasing power.

Suryanarayana (1985) analyzed that fluctuations in food prices affect producers and poor consumers as well. When prices fall, the producer would suffer, for he cannot adjust neither to his lost production or supply to the market. Similarly, rising prices affect consumers due to their inelastic demand with fixed income. The negative affect of price rise will be more severely felt by the poorer sections of the society. The distribution policy should aim at regulating prices to safeguard consumers, particularly poor consumers to improve their welfare.

Datta (1986) analyzed that the second deficiency is that there is a flourishing black market in food grains. It is so open that it cannot perhaps be called black, it is a grey market allowed to operate with impurity. Here too the city residents with their higher purchasing power get the benefit further reducing the supplies in other areas. The supplies that the reach the rural areas are sold at prices which are too high for rural incomes and here in lies the major problem which is independent of the existence of very existence of
the present public distribution system. A third deficiency lies in the inter-state disparities with plentiful supplies in some states and short supplies in others with food grains used as cattle-feed in some states and cattle-feed used as food in some.

ILO (1986) estimated that there seems to be no generalized and comprehensive strategy for dealing with open unemployment in high income countries, where the total working age population is stagnating are declining. Seemingly even more intractable are the problems of unemployment and low labour productivity in low income countries, where the labour force continues to grow rapidly and where lack of remunerative employment for the poor often means lack of food security. The world’s total working age population (adults, aged 15 to 64) is expected to grow from 3.3 billion in 1990 to 4.6 billion in 2010.

Kabra (1986) studied that the PDS was instituted as an integral part of the national food policy for consumer protection to begin with but with the new agricultural strategy after 1987, it became intimately linked with the policy of incentive price policy and antipoverty programmes and attempts to deal with what came to be called the problems of policy.

Narayanan (1986), analyzed that a scheme to cover all the people under poverty, both rural and urban, on a permanent basis with an assured supply of 100.80 kgs of grains with person per annum. The quantity of required food to such a large number of people came to about 30 million tonnes in 1973.

Vaidyanathan (1986) studied that the decline in coarse cereals production, which is grown largely for self consumption has occurred along with changes in the labour market

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involving a decrease in self employment, an increase in wage employment and growing casualization of wage labour.

World Bank (1986) conducted a study on the variability of agricultural commodity prices that explains why government in developing countries often try price stabilization schemes to protect farmers from large price falls and consumers from large price increases. When greater price stability leads to greater income stability, farmers benefit from reduced risks. These benefits however are extremely hard to estimate in practice, even though it generally accepted that farmers are at least moderately risk averse that is they are willing to accept somewhat lower income stream for the sake of greater stability. Consumers and industrial users of agricultural raw materials can also be similarly risk averse.

Radhakrishna and Indrakant (1987) in their study observed that the PDS is insulated the poor from rising open market prices. A poor person would be worse off in a dual market system if he/she gets only a small proportion of his/her total requirement through the PDS. Studies on the PDS using computable general equilibrium models have shown that open market prices would have been lower but for the PDS.

Acharya (1988) analyzed that PDS supplies have increased rapidly since the mid sixties; the average annual supply increased from 6.5 million tones during 1961-65 to 18.4 million tones during 1990-92. A note worthy feature is the response of government supply to fluctuations in production and it has been higher in drought years than in normal ones. For instance, the 1979-80 and 1987-88 years associated with low food grains production, PDS supplies were substantially higher than in normal years. In both the years the government increased the supplies through the employment programs in distressed areas.
Dreze and Sen (1989) analyzed that today, understanding the labour market is as important for addressing the food security problems of the rural and urban poor in developing countries as understanding the food market. It is now widely accepted that food security is at least as much as a matter of poverty. Limited access to food as it is a matter of supply and limited availability of food. Poduval, (1989) says that it is the landless labourers and marginal farmers who suffer most from lack of accessibility of food.

Olsen (1989) has examined the cost involved the subsidized rice scheme. She points out that in 1987-88, the total amount of subsidy on the rice scheme was more than the entire state expenditure on public health and equaled the entire cost of elementary education in the state.

Ahmad et.al (1990) explained that employment programs are not a panacea, but they may be one important element in an economically sustainable and development oriented poverty eradication strategy. They should not be viewed as alternatives to social security of non employment population segments, such as children, the elderly and the disabled.

Iliffe (1990) examined that the food security and poverty targeting potential of employment based income transfers has long been recognized in many African countries, not least in Niger and Zimbabwe. Niger’s experience with public works dates from the 1930s. Beginning with the great drought of the 1970s the Nigerian government has increasingly emphasized small scale programs to generate labour for soil and water conservation and to minimize the effects of future droughts. These programs have been supported by donors and Non Government organizations (NGOs) with close government collaboration and they have a growing focus on urban food security problems. Zimbabwe’s history of employment programs is even older, dating back to 1903.
Tyagi (1990) examined that the management of surpluses recurred through the conscious promotion of regional imbalances required for a fine balancing between the interests of the producers and those of the consumer. All the policy instruments required for the purpose were at hand. The government could fix both sets of prices; the support prices and the prices at which grain would be sold through the ration shops; it could decide how much to distribute; where it could release or accumulate adequate stocks as the occasion demanded for price stabilization and so on. However the policies actually followed have benefited the producer more than the consumer. In particular, the government failed to contain price increase despite large and growing levels of stocks. The larger share of the total grains distribution in the country continues to be a negligible.

Radhakrishna and Sathyashekhar (1991) found that agricultural output in the state experienced an annual growth rate of 3.26% during the period 1971-72 to 1978-79, but it dropped to 2.53% during the period 1979-80 to 1988-89. They also observed that agricultural output expanded in proportion to inputs till the early 1980s but not later.

Krishnan (1992) study has shown that in rural areas the variation across the rates in level of food intake are influenced strongly by levels of food grain production, independently of variations in levels of incomes and prices. This suggests that at the regional level people eat well when the harvests are good and local supplies abundant. A reason could be that the rural markets are well developed and not perfectly linked in spatial terms and in particular rural markets in the so called definite regions do not attract long-distance supplies.

Moyo (1992) analyzed that food for work program initiated in 1989 was designed to supply large scale distributions of free food that had taken place annually since the 1981-82 drought. Over 2 million people depended on relief food for survival during the
1982-84 period. A decade later, during the 1992 crises, the number of people dependent on free food distribution had risen to 6 million. The government decided to suspend free food because of 3 problems: first, household targeting was thought to be inadequate, thereby spreading scarce resources too thinly; second, there was sometimes poor targeting at a regional level; and third, criticism of the perceived dependency of recipients on free food.

Venugopal (1992) explained that a public distribution system that regulated the movement of food grains from the surplus production states to deficit production states formed one of the core elements of the food management system. Over the years there has been number of attempts made to modify the scope and coverage of the public distribution system. While price stability for the consumer in urban and major food deficit area was the focus in the early years of planned development and equitable distribution was also envisaged as the objective in subsequent plan periods. The public distribution system will be permanent feature of strategy to control price, reduce price fluctuations and to achieve an equitable distribution of essential goods.

Ahluwalia (1993) found that problem in the PDS is the amount of leakages of food grains and other commodities in the form of losses in transport and storage and diversion to the free market. According to some estimates, a little more than a third of the food grains and sugar and over half of the edible oil (38% of wheat, 36% of rice, 39% of sugar and 55% of edible oil) does not reach actual users of the PDS.

Dantawala (1993) discusses agricultural policies in India and specifically concentrate on prices, procurement and public distribution of food grains. According to him PDS is not cost effective mainly due to the high costs incurred on the scheme and the effective way of its improvement is to view PDS as an instrument of income transfer in favour of the poor. He says that privatization of PDS affect the prices, as the prices will
increase tremendously once the market knows about the large quantity of compulsive buyers. The author has also commented on the faulty operations of Public Distribution on the grounds of urban bias and substantial leakage to non-poor. The author on the question of foodgrain allocation not being consistent with the percentage of population living below the poverty line aptly remarks. “In a vast country like India in which the food economy is not centrally controlled, intervention through PDS cannot bring about perfect state wise balance in availability of food.” On procurement he has pointed out that in view of the restrictions, sometimes the procurement system has been characterized as coercive.

Parikh and Srinivasan (1993) studied that the sustainability of the provision of public goods through employment programs must largely be achieved through the public sector budget. The more prominent a role public works programs play in a state or country, the more attention must be paid to ensuring that assets and income generated by public works programs contributed to replenishing resources via taxation. The simulation analysis with a general equilibrium model for India appears to conform the superiority of rural public works programs over alternatives for poverty reduction, particularly when such public works programs are financed through taxation, rather than by reducing other investments.

Suryanarayana (1993) examined that the public distribution system as a permanent feature of the strategy to protect economically weaker sections of the society by controlling prices, reduce price fluctuations and distribution of essential goods. Acharya (1989), and Ahluwalia (1991) in their statistics reveal that the food security system has been able to dominate famines and also bring a substantial measure of relief to the poor during the years of acute scarcity particularly, heartening has been the performance of the system during the recent major droughts.
World Development Report (1993) analysed that the average daily per capita dietary average supply increased from less than 2300 calories in 1961-63 to 2440 in 1969-71, to 2720 in 1990-92 and is expected to reach a value of 2900 calorie by 2010 AD. But this positive trend disguises wide disparities in production and distribution of food among regions. Some of these data bring out the seriousness of the problem – over 826 million people are chronically hungry; they need to eat 100-400 calories more per day. World wide 32 per cent of the Pre School children are stunted, 26 per cent are underweight. The IFPRI estimates that by year 2020 there will be very little reduction in the number of malnourished children in the developing world as a whole. In fact, it may decline from 21 per cent of the population of developing countries in the mid 1990s’ to 12 per cent in 2010, but it is still likely to be a number 680 million people.

Mukherjee (1994) found that experts in the bretonwood institutions view much of the balance of payments problems of the developing countries as being caused by inflation. Excessive budgetary deficits are considered as basic to the problem and reduction in budget deficits is taken as key to tackling the malady through various measures, including a cut back on social welfare programe. In the SAP for India cut on food and fertilizer subsidies has been insisted upon and already imposed from the fiscal year 1991-92.

Parikh (1994) study measured that the welfare gains include the extent of income transfer to the poor through PDS and the consequential reduction in poverty and the extent of nutritional support to the poor. Virtually no studies exist comparing the welfare gains and costs of PDS with other anti poverty nutritious based programs such as JRY which currently coexist with PDS in India.

Pinstrup- Andersen (1994), his studies point out the rapidly increasing dependence of the absolutely destitute those lacking food security on the labour market and argue in
favour of placing strong emphasis on employment in any poverty-reduction strategy. Of course, such strategies must also address the huge challenges of producing, transporting and marketing and adequate food supply for the rapidly growing populations in low income countries. Pinstrup–Andersen (1998, 1993) evaluated that too little attention has been paid to the idea of investing in productive and remunerative employment for poor as an alternative to subsidizing food (or capital). During the 1980s, however many countries shifted their policies in this direction that is away from food subsidies and toward more development policies for poverty reduction or are now striving to implement such policies. The potential and limitations of food subsidies are now well understood.

Alagh (1995) observed that an increase in food prices makes the poor relatively worse off. A faster increase in food prices would make the poor justifiably feel relatively more deprived with high food stocks and large foreign exchange reserves, these trends could have been avoided; the finance ministry must monitor these trends more closely and put in to force remedial policies.

Mooij (1995) examined that the procurement operations and distribution through the public distribution system outlets involved a certain amount of food subsidy. Further procurement was somewhat linked with policy of providing a minimum support price to the farmers. Thus public distribution system in India has a close link with food security for the vulnerable segments of the population to depend on budgetary support for the food subsidy and price policy. Public distribution system serves to cope with emergency situations such as droughts, to distribute food at fair prices to vulnerable sections of the people to provide remunerative prices to farmers.

Dev (1996) studied that the targeting effectiveness of PDS in Maharashtra and West Bengal does not particularly favour the poor or there is no implicit targeting towards
the poor. The extent of income transfer through PDS to the poor could not be realized cost effectively due to weak targeting and leakages. Further, he argued that food subsidy can help to dampen the inflationary pressure, contribute to the alleviation of poverty and reduce inter state disparities in food consumption. All these are desirable economic and social goals and therefore food subsidy should be treated as an essential item of social investment.

Dev (1996) has considered poverty as the major determinant of chronic and to some extent transient food insecurity. His study on ‘Food Security: PDS vs. EGS’ examines poverty and food security problem with emphasis on public distribution system and employment guarantee schemes in two relatively large states of Maharashtra and West Bengal. Both these states were selected for having large urban concentration in the cities of Mumbai and Kolkata. The author has examined the rural food security in these states as compared to urban areas. The study has focused mainly on four aspects – poverty and unemployment, access of the poor to PDS, PDS vs EGS, targeting and effective functioning of the PDS. Dev says that the coverage of PDS includes food security, avoiding distress purchases, equity in distribution with respect to income inequality and regional inequalities. He argues that the wider reach of the PDS makes it more effective than the EGS. Further, proper targeting and improved delivery system in rural areas will make the PDS more efficient.

George (1996) analyzed that Kerala has an elaborate network of fair price shops for distribution of food grains and other essential items and cereals purchased from these shops accounted for a major share of the consumption of low-income groups. The scope and coverage of public distribution system has provided food security to the vulnerable segments of the society. He has also studied that the policy statements on PDS coverage
are essentially based on the assumed role attributed to it. Often the coverage related roles attributed to PDS include food security, avoiding distress purchases, equity in distribution with respect to income inequality and regional inequalities. Depending on the specific roles attributed by the analysts, there have been differing views on the relative success or failure of PDS. These observations relate to the fulfillment of the main objective of providing food security to the poor, inherent urban bias, leakage to the non-poor and interstate variations in the coverage of population below the poverty line.

Suryanarayana’s (1996) paper attempts to show that a proper assessment of the PDS has to be made in the wider context of agricultural growth, evolution of integrated food and agricultural policies. According to the author, food security includes both physical and economic accessibility of food for the entire population. PDS took care of physical accessibility, whereas poverty alleviation programmes were meant to raise economic accessibility. The emphasis of food policy in the earlier years was the physical accessibility, which met mostly through imports rather than increased production. The new agricultural strategy promoted foodgrains production but resulted into a particular procurement, buffer stocking policies and increased price. Against this background the author find it difficult to revamp the system of public distribution. The author advocates for an alternative cost-effective option to provide safety nets to the urban and rural poor.

Amartya Sen in his book ‘Hunger in the World’ (1997) has pointed that much more attention needs to be given to issues relating to economic growth, employment, decent pay, diversification of production, provision of medical and health care arrangements for special access to food on the part of vulnerable people.

Indrakanth’s (1997) study was conducted in Andhra Pradesh to find out whether the food is reaching the deserving persons or not. The study found that the leakages are
maximum in village and town levels due to low monthly income of FPS dealers which tends them to involve in malpractices – non-poor households go for white cards to avail the concessional medical facility in government hospitals leaving their quota insured, white card holders in rice surplus districts depend on their home-grown stock, again leaving their quota unused and some of the poor households may not but their full quota which may also be diverted to the market. Apart from this, very poor households may not buy their full quota which may also be diverted to the market.

Radhakrishna and others (1997) examined that the PDS as it evolved during 1950’s and 1960’s probably served the dual purpose of containing the upward pressure on prices of staple food and protecting urban consumers even if it did not serve the interests of rural poor. Also during this period, employment programs were limited in scope so that during a drought period, PDS supplies were augmented basically to keep the market price of staple within reasonable bounds. By the 1980’s the whole agricultural scenarios has changed. The country experienced a green revolution and per capita food availability has significantly increased. Nevertheless rural poor households especially the landless poor benefited little from the program.

Ramaswami (1997) finds strong evidence that speculators in the Indian wheat market make systematic mistakes in forecasting future prices. The bias in their forecasts varies directly with past price spreads. This implies that relative to the rational expectations equilibrium benchmark, the intra- year allocation of wheat supplies has been inefficient. Thus, for instance, in years following large seasonal price rises, traders store too much of wheat. At one level, these findings provide some support to the case for government controls on speculation as well as for countervailing measures such as sales of grain from public stocks.
Shankar (1997) has commented on revamped public distribution system regarding who has benefited from the system and in what proportion. The author has conducted the study of Revamped Public Distribution System (RPDS) in 21 remote tribal villages of Hilly block in Mirjapur district of Uttar Pradesh. The study observed that the fair price shop dealers were getting wheat at Rs 374.50 per quintal whereas they are supposed to sell it to the consumers at the rate of Rs 377 per quintal. The shopkeepers were unanimous in reporting that they just cannot afford to sell at the stipulated prices since they have to pay Rs 10 per bag or drum of kerosene to the inspector, Rs 5 per bag to the clerk and Rs 2 per bag to the porter. Apart from this the cost of transportation was to be met by the shopkeeper himself for which the village ‘Pradhan’ has to kept in good humour as he only recommends the license of transportation. The study revealed that entire foodgrians of 21 villages were going to the black market as nowhere in these villages the distribution took place. The study also showed that market dependence was inversely related to size of landholding.

Paroda (1998) explained that if during the first three decades of our independence, physical access to food was the most important food security challenge, economic access to food has now become the most important cause of under nutrition and mal nutrition. In the 21st century ecological assess to food might become the most important challenge owing to the damage now being alone to land water, flora, fauna and the atmosphere.

Patil Jayant (1998) examined that the hard labour of scientists, extension workers and others has helped us in achieving food security and a much time is ripe for devoting attention towards “nutritional security”. Horticultural crops especially fruits and vegetables are not only rich source of minerals; vitamins and highly nutritious but also provide larger employment potentials income and increased biomass.
Rao (1998) in his paper attempts to study the likely impact of economic reforms that are expected to play a major role in stepping up growth with the government and peoples organizations looking after the poor. The dimensions used by the author to study the recent trends in the conditions of the poor is to see the direction in which they are moving were access to growth opportunities, investments in education, health, nutrition, etc., and participation in decision making or development priorities, allocation of funds, choice of schemes and selection of beneficiaries. There is no serious intention to take a long-term view of the problems faced by the poor in becoming productive members of the society. According to him employment programmes and the PDS for foodgrains are two programmes which are of crucial importance in providing support to the poor.

Alamgir & Others (1999) study revealed that the low growth rate of agriculture in 1973-80 as compared to 1965-73 in all regions indicates the lack of attention paid to this sector. The situation was mixed in the 1980-87 period. While there was an improvement in the performance of Sub-Saharan Africa compared to 1973-80 for all regions except East Asia growth rates were below those outlined for the period 1965-73.

Dev (2000) in his study emphasis that there are no major initiatives to arrest some of the disturbing trends in agriculture, rural development and poverty. These trends include: (a) rural poverty reduction sluggish in 1990s; (b) growth of real wages in rural areas lower; (c) slow down in the growth of rural non-farm employment; (d) worsening quality of employment (casualization, etc); (e) lower agricultural growth; (f) increased regional disparities in per capita income and per capita consumption; (g) increasing food prices; (h) much higher level of average buffer stock than the optimal in 1990s. the paper discusses the strategies needed for agricultural development and for improving the effectiveness of PDS. The author argues that for achieving higher agricultural growth,
public investment on irrigation and agricultural research are important. Private investment and participation in critical areas like water management (e.g., watersheds and participatory management in irrigation), transport and storage are equally important for improving efficiency and productivity in agriculture. The author criticizes the budget for not giving due attention on the technological improvements which can enable Indian agriculture to find all the solution of food insecurity. Regarding PDS the author argues that increasing issue price is not the solution for reducing food subsidies and reduction in poverty.

Andersen (2001) observed that food insecurity is closely associated with poverty. About 1.2 billion people in the developing world are absolutely poor, with only a dollar a day or less per person to meet food, shelter and other basic needs. According to the World Bank, the number of poor people could remain in the unchanged levels. However, if countries adopt policies and interventions that foster inclusion and if all benefit equally from growth, the number of people could be declined by 4 per cent to 80 million by 2008.

Datra and Ramaswamy (2001) analyzed that PDS is necessary not only to maintain fiscal balance but also to strengthen food security to the poor. PDS has been one of the most important elements in India’s safety net system for almost 50 years.

Wilson (2001) studied that “Poverty is one of the most important unfinished tasks of this century” food Senatory Sartaj Aziz, for ever finance minister of Pakistan and a member of the international advisory committee for IFPRI’s 2020 vision initiative. “It is atrocious that there are still over one billion people living in poverty, half of them in conditions of extreme poverty and an estimated 700 million people who lack enough food to eat”. Unfortunately the most prevalent behavior exhibited by governments and the donor community toward has been very active after has led to famine.
Jha (2003) noted that food is one of the basic necessities of human being along with air and water. Population factors play a decisive role in the human endeavour to attain food. Availability and accessibility to food circumscribe the quality of human population. On the other hand population growth impacts food requirements sustained access to food still eludes poverty stricken people of the developing world.

Gadege (2004) examined that the black marketing was carried $\frac{1}{3}$rd of the commodities from PDS, especially in rice and wheat similar situation was found in the rest of the schemes also. Further, TPDS shoes that, in Bihar and Assam 64% of rice of stock was disappeared from PDS, 44 per cent of wheat was diverted to open market. In Bihar diversion rate was 47 per cent. Where as, in Nagaland it was 100 per cent. In case of Sugar it was relatively low at 47 per cent in Bihar and 32 per cent in M P. in Delhi it was 50 per cent in respect of all commodities. Due to this state supply corporation has no money to buy food grains from FIC, no money for petrol, even staff does not receives the salary per month. Most of the dealerships are belong to clients of MLAs. The PDS is working in different constraints. The cost effectiveness of PDS reaching the poorest 20 per cent of the households’ cereals was very small. For every rupee spent less than 22 paise reached the poor. The study of bureau of Directorate of Economics and Statistics in Karnataka shows that only 13 paise reached the poor.

Sinha (2004) analyzed that food security has a physical, environmental, economic and social issues. It involves not just production, but access; not just output but process; not just technology but policy; not just global balance but also notional conditions; not just national figures but household relatives; not just rural but urban consumption; and not just quality of food but also quantity. She defined that food security should be broadened to make it holistic so as to mean “every individual has the physical, economic and
environmental access to a balanced diet that includes the necessary macro and micro nutrients and safe drinking water, sanitation environmental hygiene, primary health care and education so as to lead a healthy and productive life”.

Chand (2005) analyzed that about 91 per cent of demand is met from the open market and the remaining 9 per cent from PDS supply. In India per capita daily availability of cereals from the open market was 428.5 gram in 1995-96 and 423.1 gram in 1996-97. Then cereal availability from open market steadily declined, to touch 367.7 gram in 2000-01. PDS supply also showed a sharp decline after 1998-99. He explored whether this decline in cereal intake resulted from the increase in cereal prices.

Gadage (2006) estimated that one fair price shop was covered with the population of 2000, but only 50 per cent of rural and 58 per cent of urban population enjoyed the food security. The dependence on open market is much higher. He noted that cost effectiveness of reaching the poorest 20 per cent households left out from PDS because of lack of permanent addresses and purchasing power.

Sarbri (2006) studied that despite adequate food for all at a global level, more than 800 million people remain chronically undernourished. There is therefore, adequacy of food in the aggregate does not rule out hunger for food to household and individuals, people affected with hunger and poverty has increased many fold.

Singh and Others (2006) defined that food security undergoes a change with the stage of development reached by the society and in developing country like India, the food security may be visualized to make available minimum quality of food grains to the entire population. Hence trend in per capita supply of good grains is always considered as an indicator of improvements in the food security.
Singh and Others (2006) found that the adequacy of food grains at state level does not guarantee the availability of food grains at low prices to the poor households until and unless distribution is proper and there are no constraints of purchasing power for the poor segment of population. The general impressions is that there have been significant disparities in the state wise public distribution Qualities

There are some other micro-level studies which have examined the extent of benefits derived from PDS. For instance Sastry et al (1990) in a study of Rayalseema area found 78 per cent of poor households were covered by the subsidized rice scheme and that each beneficiary household got 19.5 kg of subsidized rice per month. They noticed that non targeted groups were also enjoying the benefits of the scheme. However the extent of leakage in the PDS was much smaller (22%) than in the IRDP (61%) and others schemes.

The extent and depth of food insecurity in the developing world at the turn of a new century and millennium remains unconscionable. According to recent projections from the food and agriculture organization of the United Nations (FAO), though the world food summit goal of having number of food insecure people from 800 million in 1995 to 400 million by 2015 will not be achieved until 2030. About 800 million people that is one sixth of the developing world’s population- do not have access to sufficient food to live healthy, productive lives. Around 280 million of these food insecure people live in South Asia; 240 million in East Asia; 180 million in Sub –Saharan Africa; and the rest in Latin America, Middle East and South Africa. Although progress is being made in tackling food insecurity, it is slow. And in Sub-Saharan Africa the number of food insecure has actually doubled since 1967-71.
The foregoing reviews clearly demonstrated the importance of PDS for poor. After reviewing the existing literature on public distribution system it becomes clear that PDS is one of the most important welfare schemes to protect the poor by providing food security. Many authors have underlined the importance of PDS. However, very few attempts have been made to study the effectiveness of PDS and functioning system of PDS shops in India. Most of the studies emphasized on availability of foodgrains and few on food security, which are mainly concerned to north India. Very scanty information also found on impact of PDS on BPL households. Therefore, the present study aims to understand impact of public distribution system on food security of the poor in India with special reference to Karnataka state. This study examines the impact of PDS empirically by using micro level data along with secondary data, it aims to bridge the research gap that exists in this field of research to draw more and useful inferences to strengthen food security mechanism to ensure adequate supply of healthy and nutritious food to the needy poor through effective PDS in India.