India’s Hunger Problem: A Comparative Analysis of the Performances of Food Distribution at the National level and in the State of Tamil Nadu

Raghul Madhaiyan
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Abbreviations
AAY            Antyodaya Anna Yojana
APL            Above Poverty Line
APMC           Agriculture Produce and Marketing Committee
AWC            Anganwadi Centres
AWW            Anganwadi Workers
BPL            Below Poverty Line
CACP           Commission on Agricultural Costs and Prices
EAS            Employment Assurance Schemes
FAO            Food and Agriculture Organization
FC             Forward Caste
FCI            Food Corporation of India
FPS            Fair Price Shop
GDP            Gross Domestic Product
GPRS           General Packet Radio Service
GPS            Global Positioning System
IAY            Indira Awaas Yojana
ICDS           Integrated Child Development Services
MDG            Millennium Development Goal
MDMS           Mid-Day Meal Scheme
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>MPCE</td>
<td>Monthly Per Capita Expenditure</td>
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<td>MSP</td>
<td>Minimum Support Price</td>
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<td>MT</td>
<td>Million Tonnes</td>
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<tr>
<td>NFHS</td>
<td>National Family Health Survey</td>
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<td>NSSO</td>
<td>National Sample Survey Office</td>
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<td>OBC</td>
<td>Other Backward Castes</td>
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<td>PDS</td>
<td>Public Distribution System</td>
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<td>PEO</td>
<td>Performance Evaluation Organization</td>
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<td>SC</td>
<td>Scheduled Caste</td>
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<td>SGRY</td>
<td>Sampoorna Grameen Rozgar Yojana</td>
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<td>SGSY</td>
<td>Swarnajayanti Gram Swarozgar Yojana</td>
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<td>SHG</td>
<td>Self Help Group</td>
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<td>ST</td>
<td>Scheduled Tribe</td>
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<tr>
<td>TINP</td>
<td>Tamilnadu Integrated Nutrition Programme</td>
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<td>TNCSC</td>
<td>Tamil Nadu Civil Supplies Corporation</td>
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<td>TPDS</td>
<td>Targeted Public Distribution System</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNHR</td>
<td>United Nations Human Rights</td>
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<td>WFS</td>
<td>World Food Summit</td>
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RAGHUL MADHAIYAN

Madhaiyan, R., 2014: India’s Hunger Problem: A Comparative Analysis of the Performances of Food Distribution at the National level and in the State of Tamil Nadu. Master thesis in Sustainable Development at Uppsala University, No. 178, 30pp, 30 ECTS/hp

Abstract

Food is fundamental for humans to survive and vital for development. Food security is a major issue and sustaining it is a challenge for the countries of the world. With climate change and other environmental and social factors greatly influencing the current chances for world food security, it is of prime importance for countries to work towards achieving it. A major part of the poor and vulnerable section of people lives in the developing and poor countries with rampant food insecurity issues. To achieve the UN’s Millennium Development goal of halving hunger by 2015, food security measures are implemented in poor and developing countries with the help of world organizations to alleviate poverty and hunger.

This paper studies the situation in India, where poverty and hunger is a major block for the development progress. India has proven its authority in various fields with a fast developing economy. On the other hand, poverty and hunger prevail among almost half of the country’s people. The country has taken various measures to attain food security and curb hunger among the poor. The major welfare measure in the country is the food distribution schemes implemented by the government. The performance among different states in the country varies due to various factors. The performances of the country as a whole and of the southern state of Tamil Nadu are taken into consideration for this paper. The paper will deal with the performance and related issues such as policies, administration, operations and social influences on the food distribution system in a comparison between Tamil Nadu and the rest of the country.

Based on the official records on procurement and distribution of food grains as well as on literature studies on the food security situation in India and Tamil Nadu state, this paper suggests that there is a need to modify the mechanisms that constitute the distribution system, which can be learnt from Tamil Nadu state where the performance is better than the average for India as a whole. Even though Tamil Nadu faces similar problems as other States, the better performance of Tamil Nadu does not affect the food distribution system in the country. At the national level, the situation is worse with magnified problems of performance affecting the food distribution system.

Keywords: Sustainable Development, Performance Evaluation, Poverty, Hunger, Food Security, Food Distribution System

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Summary

Ever since the Brundtland Commission report was published in 1987, sustainable development has been the guideline for various organizations around the world. Sustainable development has become a main concept in goals designed by governments and international organizations in recent years. Food security is an important factor to achieve sustainable growth globally and locally. This paper takes an analytical view of food insecurity issues and measures taken toward achieving food security.

This paper studies the food distribution system in India and does a comparative analysis of the system at the national level and the state of Tamil Nadu. Not only the statistics are measured and compared, but also the mechanism behind the system are analysed in a holistic sense to weight the actual difference between other States and Tamil Nadu.

The prominent issues surrounding the poor performance at the national level amount to a multitude of factors commanding influence over the system. Apart from inadequate policies, irresponsible governance and poor operations, which prove to be the major drawbacks, the social discriminations and prejudices like gender bias and the caste system, economic disparities and political influences, play significant parts in shaping the food distribution system. Whereas in Tamil Nadu such factors exist as well, they do not affect the system in the same way and to the same extent. This is made possible by collective efforts by the state government and people to make the system function. If cue is taken from Tamil Nadu, the country’s overall performance can only be strengthened.

Keywords: Sustainable Development, Performance Evaluation, Poverty, Hunger, Food Security, Food Distribution System

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Acknowledgements

My utmost thanks go to my supervisor, Gloria Gallardo, for her excellent supervision and guidance all through my thesis work. Gloria has been instrumental in shaping up my ideas with lots of inputs and suggestions regarding the issue handled in this paper. Her patience in handling me helped a lot with my focus. And thanks to Lars Rudebeck for reading and evaluating my thesis and helping and guiding me.

Special thanks to my friends Ludrick, Kimi, Michal, Mike, Muk, Nandu, Matt, Rameez, Vinoth, Shreya, Himanshu, Floriana, Keiko and Yuliya who made my life in Sweden terrific and thanks again to all my other friends, family members and everyone I have met and interacted with, for inspiring me and supporting me all this time in Sweden.

All the best to everyone

Raghul Madhaiyan
1. INTRODUCTION

Food is essential for human survival and imperative for development by means of healthy and able manpower. Food security is a major and fundamental issue in the world and access to food is a rightful measure for the people to lead a healthy and productive life. Agriculture came into prominence and was one of the driving forces in establishing a stable economy for civilizations. People were able to access food in a systematic manner without periodic constraints as a result of procurement and storage. In modern times, humans found inventive and fast paced methods to cultivate food on a large scale. As a result, food production grew exponentially. A lot of societies have achieved food security only in the modern age due to large food production and relevant food security measures (Timmer, 2004).

With an unprecedented economic growth in modern times, one would expect a much developed and well organized system to overcome hunger. But that is not the case. To the contrary, poverty and hunger expanded significantly. The disparity between the rich and the poor grew wider and the poorest section of the society remained the same or even gotten worse. Access to food turned into an economic preferential priority. The economic stability of the rich gives them room to absorb market fluctuations, in any case of aberrance (Timmer, 2004). Meanwhile, the impoverished and secluded sections of society continue to reel under enormous pressure of being economically viable to be able to even enjoy the basic right of humans; access to food (Gustavsson, et.al, 2011).

Millions of people die due to hunger world over and a significant amount are undernourished. According to the UN, around 21,000 people die every day and 1.5 million children die every year due to hunger and related causes. With more than 800 million people suffering from hunger, the United Nations General Assembly, in 2000 adopted a resolution passing the Millennium Development declaration comprising eight goals to be achieved by 2015; including reducing hunger by half. Picture (1) signifies the actions taken to meet the MDG. According to the Millennium Development Goal report 2012, extreme poverty rate has come down from 47% in 1990 to 24% in 2008. But, hunger remains considerably high, even though there is a reduction in poverty rate. Around 850 million people suffer from hunger in 2008 and one in five children under the age of five in the developing world is underweight (UNDP, 2012a). There exists substantial gap in the coverage of goals with targets failing to address important development needs for that sector and there is a lack of clear concepts and shortcomings when it comes to hunger reduction as there is no clear and specific target regarding agriculture since most of the world’s poor people are rural farmers (The Lancet, 2010).

According to the Food and Agricultural Organization report 2012, about 870 million people or one in eight people of the global population are undernourished. Out of this, around 852 million people live in the developing and poor countries. Picture (2) is an example of starving people in poor countries. There is a significant overall progress towards achieving Millennium Development Goals by 2015 but there remain considerable differences among regions and countries and some have even moved away from the trajectory. For instance, Western Asia has seen an increase in the prevalence of undernourishment in recent years (FAO Report, 2012). The hunger reduction goal of the UN does not have any indicators concerned with policy interventions or with service access and also implementation difficulties pertaining to institutional structures around MDGs that are assigned to perform tasks, this, in turn, makes the poverty reduction goal feeble (The Lancet, 2010).

In 1945, the Food and Agricultural Organization (FAO) was established as a specialized United Nations agency to focus on the regulation of the world food and agriculture. Since its inception, the FAO has been leading international efforts to defeat hunger globally. It acts as a neutral forum for nations to negotiate agreements and debate policies on food regulations. Alongside policy drafting and information dissemination and other objectives, it emphasizes on improvement in food marketing and distribution. Some of its activities are involved in raising the nutrition levels and improve the efficiency of food distribution in the poor and developing countries where urgent measures are needed in alleviating poverty and hunger (FAO Report, 2012).

The Universal Declaration of Human Rights adopted by the UN General Assembly in 1948, in its Article 25, states that “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food…” (UNHR, 2013). The declaration proclaims this right as a common standard of achievement for the people. Later in 1966, the International Covenant on Economic, Social and Cultural Rights recognized the right to food and stressed the importance of improving production methods using scientific and technical knowledge. Utilization of resources and food distribution methods were also brought under the scanner for an efficient implementation of the goals set. But, there were difficulties in implementing those drafts by individual states and criticisms were made on the generality of the proposed terms (UNHR, 2013).
The World Commission on Environment and Development was established in 1984 with the intent to work on environmental and development situations across the globe. In 1987, the commission came out with the report “Our Common Future”, famously known as “Brundtland Report”. In this report, sustainable development is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. The report also emphasizes the limitations imposed by the current state of technology and social organizations and the ability of the biosphere to absorb the effects of anthropogenic activities. With population increasing at rates unmatchable by the resources available, there is an urgent need to channelize the accessibility of resources in a way equitable and sustaining under the guidelines of sustainable development.

The World Food Summit in 1996 redefined the term food security that “exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for a healthy and active life”. The summit came up with the declaration with emphasis on multitude of issues concerning establishment of food security on global, national and household levels.

Achieving food security implies not alone enough food to feed all but to make sure it reaches everyone. The World Food Summit’s definition of food security encompasses five fundamental aspects: availability, access, stability, nutritional status and preferences of food. All of these aspects are influenced by physical, economic, political and other conditions within communities and even with households and are often destabilized by shocks such as natural disasters and conflicts (Post note, UK Parliament, 2006). Most of the developed countries have achieved food security as defined by the World Food Summit. At the same time, most of the poor countries have not even achieved the “availability” aspect when it comes to food security. Even with some developing countries having achieved food sovereignty, the percentage of hungry people remains unacceptably high.

Poverty and hunger in India are two major issues that are interwoven and a major block for the country’s development. Historically, India, until the green revolution of the late 1960’s, has remained a food deficit country. Frequent famines and absolute poverty made hunger chronic. Post green revolution in the 1960’s, which brought a change in agriculture, helped the country yield food grains exponentially. Surplus stocks followed and India rose from a food-deficit country to a food surplus country. As a result, food security at the national level was achieved with overflow of food grains. Paradoxically, a large portion of the society remains hungry (Athreya, V.B. et al. 2008).

In the case of India, the food production outweighs requirements in recent decades. The food grain production in 2011-12 stands at an estimated 252.56 million tonnes. On the contrary, India ranks 94th in the Global Hunger Index and an estimated 221 million people are malnourished in the country (Athreya, V.B. et al. 2008). The
government of India implements various schemes for poor people in order to curb food insecurity. But, the results reflect a different situation. According to the National Family Health Survey, 56% women are anaemic; 30% newborns and 47% children are malnourished (GoI, 2007a). The prevalence of undernourished children in India is among the highest in the world.

In general, to achieve food security, two important dimensions must be accomplished; availability and access. A country needs sufficient amount of food at the national level to establish mechanisms for attaining food security; a food sovereign state. Availability of sufficient food at the country or local level does not guarantee that all people are food secure since household economy and local infrastructure could deny access to the desired quantities of quality food (Post note, UK Parliament, 2006). The access refers to the capacity to produce, buy and/or acquire appropriate nutritious food by the households and the individuals (Timmer, 2000).

However, the primary reason is poverty that people lack sufficient purchasing power to acquire necessary quantities of quality food. Therefore, both availability and access components of food security are inseparably linked to each other (Pinstrup-Andersen, 2009). The access entails both physical access and economic access - the former refers to a place where food is available and the latter denotes “entitlement” to food (Sen, 1982). Physical access requires efficient market infrastructure for people to access food at low cost. Through own production or having food buying capacity from the market or having access or right to other sources of getting desired food will lead to proper entitlement (Staatz et al., 2009). Therefore there is a direct relationship between poverty and food insecurity since the very poor cannot take preventive measures against food insecurity and thus they are the first to be vulnerable to it (Cullet, 2003). This multidimensionality in problems makes poverty an issue jeopardizing national security in terms of economy, human resources and environment.

This paper will study the food distribution system in India. The active food distribution measures enacted by the government and the problems surrounding the proper implementation and plausible corrective measures to overcome the situation will be analysed. The performance of the southern Indian state, Tamil Nadu, one of the better performing states of the food distribution system and the performance of the country as a whole will be compared and analysed in a comprehensive manner.
2. PURPOSE AND RESEARCH QUESTIONS

The purpose of this study is to analyze the implementation of food security measures in the state of Tamil Nadu and relate it to the overall performance of the country, in the context of the distribution mechanism intended to reach the poor and to reason the better performance of the state. The aim is to bring out lessons from the state’s performance on the food distribution that could be influential over the country’s distribution mechanism.

The following questions will be addressed:

1. How do the distribution measures reflect on the poor’s ability to cope with hunger in the state?

2. Why is the performance of the state of Tamil Nadu in food security measures better compared to the overall performance of the country?

2.1. METHOD

As method, this paper will mainly rely on literature studies on the food security situation in the context of distribution in India and the state of Tamil Nadu. This will be combined with data from official records on procurement and distribution of food grains of the state and central food corporations, responsible for distribution of food grains in India.

To give the background to the thesis, food security will be first analysed and discussed within the framework of UN’S Millennium Development Goal of eradicating extreme poverty and hunger and Article 21 of Indian constitution declaring right to food. After that, the food policy of India to ensure food and nutrition security will be reviewed as well as literatures based on social and environmental influence on the food security in India. These forms of sources will be analysed and discussed to provide a holistic perspective on the issue.
3. INDIA – AN OVERVIEW ON HUNGER AND FOOD SECURITY

India is a country located in south Asia with Pakistan, China, Bangladesh, Afghanistan and Sri Lanka as its neighbouring countries. It was one of the former colonies of the British Empire and got its independence in 1947. Currently, it is the second most populous country in the world with more than 1.2 billion people and is the seventh largest country in the world by area. It is the largest democracy in the world. The Indian economy is the tenth largest in the world by nominal GDP. The country’s military expenditure is the seventh largest in the world. Currently, India is one of the fastest growing economies in the world and is among the developing nations. It is part of the Commonwealth of Nations. The country consists of 28 states and 7 union territories [see Picture (3)] with around 70% of the population living in rural areas and mostly dependent on agriculture. India faces challenges in the form of poverty, corruption, social and gender discrimination and various other problems that block the development of the country (GoI, 2013).

3.1. POVERTY IN INDIA

Poverty and hunger are inseparably associated and India is no exception from this. India is home to more than 200 million people that are food insecure, the largest number in the world country wise. The International Food Policy Research Institute reported that India is ranked at the bottom with 65th position (out of 84 countries) with a Global Hunger Index of 23.90, which indicates alarming food security situation.

Pic. 3. India map, Courtesy: TN Govt, 2012
According to official estimates, the population of India below poverty line was 194.7 million (1995-97) and in 2005, it was more than 300 million (Saxena, 2011). The official poverty estimates by the Planning Commission of India estimated 28.3% (rural) and 25.7% (urban) are below poverty line. This estimation is based on the Millennium Development Goals', set by the UN, use of international poverty line of 1$ per day. In India, a monthly per capita consumption expenditure of Rs. 356 (rural) and Rs. 539 (urban) was deemed to constitute the poverty line in 2004-05. This is related to the official calorie intake level of 2400 (rural) and 2100 (urban) per person per day (Mehta et al., 2011). The nutrition norm set earlier by the government has been abandoned and subsequent updates are based on just consumer price indices. In 2009, the Tendulkar Committee report on poverty estimated 37% to below poverty line. Saxena report, 2009, on poverty estimates placed it at 50%, whereas, Arjun Sengupta Commission report in 2006, estimated that 836 million people in India live with less than Rs. 20 per day per capita consumption. 17, 368 farmers committed suicide in 2009 in the country and the total number of farmer suicides since 1997 is 216,500. This is largely due to poverty and indebtedness (Ramasamy & Moorthy, 2012).

3.2. INFLUENCE OF SOCIAL INEQUALITY

Social factors play a crucial role in determining the status of food insecurity in India. India is known for its caste system since time immemorial and it is part of the tradition. Caste and tribe are structural factors which predispose certain groups to long term poverty and deprivation. The Scheduled Caste (SC) and Scheduled Tribe (ST) categories have long been suppressed sections of the society. They form the lower sections of the society that mostly are poor and illiterate. While Scheduled Tribe represents the tribal communities of the country, Scheduled Caste form the upper section of the caste hierarchy respectively and are generally well educated and wealthy. They are influential in the society by holding prominent positions in the system and they exert dominance over rest of the castes. This caste system came from Hindu mythology and during the medieval period, was assigned based on the occupation. In the recent centuries, it became hereditary with people belonging to a specific caste remained the same (Szczepanski, 2013). Now, some people from the lower castes are marginal and small farmers, but the majority work as agriculture labourers. Almost two-third of the bonded labourers in the country is from Scheduled Castes and Scheduled Tribes. There exists a strong correlation between caste and poverty in India (Lanjouw & Stern, 1991). Poverty remains endemic among most of these sections in the country. Among the rural communities, 48% Scheduled Castes and 52% Scheduled Tribes are poor. These communities constitute around 20% of the country’s population and 81% out of this live in rural areas. 63% of the overall community work as wage labourers (Thorat, 2007).

Hunger in India also has age and gender dimensions. India is a patriarchal society and gender and age discriminations are clearly evident. More than half the country’s women and three quarters of the children are anaemic (Swaminathan, 2009). According to National Family Health Survey in 2006, 49% women are poor; one third of the women suffer from chronic energy deficiency; 46% of the children below 3 years are maldnourished as compared to the overall poverty level of 37%. The percentage of the undernourished children remained stagnant since 1998. Gender discrimination exacerbates the impact of poverty on women due their status in the society, unequal allocation of food, wage rates for labour works and lack of inheritance rights. As a result, their nutritional status remains low and it reflects on the health of the children (Mehta, et.al, 2011).

3.3. SMALL FARMERS IN INDIA

As agriculture employs more than 60% of the country’s workforce, there is little doubt that it comprises a large section of small scale farmers. The smallholder farmers constitute around 83% of the 121 million farming households of the country. Marginal and small farmers possess less than 2 hectares of land on an individual level. Nevertheless, they form an integral part in the country’s overall food production. Even though they hold only 33% of the country’s total cultivated land, they provide a significant amount in the overall grain production at 41%. In the period of 1971-99, the total number of the country’s farm holdings (aggregate for all farm sizes)
increased from 70.5 million to 106.6 million. In this, the small scale holdings rose from 49.1 million to 83.4 million (Birthal & Joshi, 2007). As a result, the average size of land holdings decreased, since the total agricultural land area remained more or less the same. These smallholder farmers are part of the country’s poor and hungry people. The country’s two-third of the poor people dwell in the rural areas and the small holder families constitute more than half the poor and hungry in the country, irrespective of the significant contribution to the country’s GDP. Pictures (4) & (5) indicate the status of poor farmers in rural areas. According to government statistics, in 1993, 73% of marginal and small scale farmers are undernourished. Whereas, the agricultural labour households are mostly excluded from the public distribution system of subsidized food. Only four states in the country include more than two-thirds of the labour households under the distribution system. The all India average of exclusion of these households remains at 52%. In the poverty stricken states of Bihar and Uttar Pradesh, the exclusion is alarming at 71% and 73% respectively (Swaminathan, 2009).

Since the economic reforms in 1991, the governmental expenditure on agricultural development has dropped in a significant manner. The reforms paved way for large scale, commercialised agriculture and market fluctuations. Low income elasticity and high food prices elasticity came into existence. Consequently, agricultural growth has dropped to 1.8% and the share of agriculture in the country’s GDP dropped from 57.7% in 1951 to 15.7% in 2009 (Swaminathan, 2009). But, the share of workforce in agriculture still is more than 60%. The World Bank report, through studies conducted across the country, suggests that growth in agriculture and rural development actually helped reduce poverty drastically, whereas industrial and urban growth failed to create any impact (Ravallion & Datt, 2002). The impact of agricultural development in poverty reduction is negligible when dominated by large farmers (Timmer, 1997).

The economic reforms in 1991 brought the neo-liberal policies guided by the Bretton Woods Institutions. This opened up the market structure and cause for deflationary macroeconomics. Farmers were exposed to the volatility of world prices, which in turn had an adverse effect on the cost structure of cultivation patterns. Regarding food security, the reformed policies brought three key objectives:

(a) Food subsidy reduction
(b) Leave food distribution to markets and
(c) Undermining food policy intervention and subsidies to the „poorest of the poor”.

This act of narrow targeting as part of economic liberalization failed to address chronic hunger and in turn, weakened food security and had an adverse impact on the consumption and nutrition (Swaminathan, 2009).
3.4. FOOD SECURITY MEASURES IN INDIA

Article 21 of the Indian constitution, enacted in 1950, dealing with the fundamental rights of people, outlines the obligation of the government to guarantee the people of India their right to food. Even though, the right to food is not emphasized in an explicit manner, the constitution provides fundamental right to the protection of life and personal liberty. It also mandates the states to ensure right to life for citizens; including the right to live with dignity with at least 2 meals per day. Article 47 of the Directive Principle of State Policy specifies „duty of the state to raise the level of nutrition and the standard of living and to improve public health” (Cheriyan, 2006).

Food security policies in India can be traced back to the post Bengal famine period, which happened in 1943. The Food Corporation of India was setup in January 1965 in order to establish a strategic and authoritative position for the public sector in the food grain trade. The objectives of the corporation are to regulate the price support operations in favour of farmers; distribution of food grains all over the country through public distribution system and to maintain operational and buffer stocks of food grains. Commission on Agricultural Costs and Prices was also setup for recommendation of procurement prices from the farmers based on the costs of cultivation. Successive monsoon failures led to food grains instability in 1965-66 and public distribution of food was started mainly to appease the drought and famine hit regions of the country. India started importing wheat from the USA as a consequence of the monsoon failures (Athreya, V.B. et al. 2008). India remained predominantly a food deficit country until immediately after the independence. As a response to the food crisis, the government brought forth a new agricultural strategy, popularly known as Green Revolution.

Under the Green Revolution, high yielding seed varieties, combined with chemical fertilisers and agricultural extension efforts were utilised, rightly backed up by a significant public investment in input subsidies, research and improvement in infrastructure. The country’s food grain output increased substantially and the rate was higher than the population growth over decades up until 1990. The country from being a food deficit country turned into a self-sufficient country. The Green Revolution was limited mostly to rice and wheat production. The emphasis was on increasing the yields per acre and similar amount of cultivated lands were used for food grain production. (Athreya, V.B. et al. 2008).

This substantial food growth was a result of a combination of policy regulations and administrative measures. Institutional efforts were put in raising agricultural technology; developing rural infrastructure and investments related to human capabilities were executed. Economic policies such as credit support to farmers and procurement of food grains at a minimum support price helped improving the output. By 1991-92 the food grain production reached 168 million tonnes and in 2001-02, it was 212 million tonnes. By late 2001, 65 million tonnes were stored as buffer stock. India achieved self-sufficiency at the national level. Currently, India is the third largest producer of cereals, behind China and the USA (Athreya, V.B. et al. 2008).

3.4.1. Constitutional Acts and Policies on Agriculture and Food Security

Long term food policy needs to comprise of two primary elements; one is to have measures well suited for the prevailing economic and institutional conditions. Second is to constitute a package for enduring improvements in agricultural productivity, income distribution and functioning of the market. This will lead to a gradual reduction in need for large scale public intervention to improve the nutritional intake of the poor (Rakshit, 2002). The main objective of India’s food policy is to ensure availability of food grains and an adequate supply regime at reasonable prices, especially for poor. The focus is essentially on the growth in agricultural production; support prices for procurement of food grains from the farmers and to maintain the central food stocks to stabilize market prices and during adverse conditions like famines and droughts.

The Agricultural Produce Act, 1937, was legislated for management of the market system. The objective of this act is to achieve an efficient system of buying and selling of agricultural commodities. Through this act, the state governments were given the power to regulate the commodity markets.

The Government of India passed the Essential Commodities Act in 1955 for a guaranteed availability of essential commodities to the consumers. The Act provides for the regulation and control of production, distribution and pricing of the commodities. This is to ensure stable supply and equitable distribution of the commodities and availability of those commodities at a fair price. The Act also intends to protect the consumers from exploitation of fraudulent traders and monitoring of hoarding and black marketing of the commodities. The powers under this Act are delegated to state governments for effective implementation (Athreya, V.B. et al. 2008).
Agricultural Produce Marketing Committees were formed by the state governments. Most of the whole sale markets and partially rural primary markets came under this regulation. Establishment of such regulated markets resulted in helping create orderly and transparent marketing conditions. It also helped increase market access by farmers by increasing the number of regulated market yards. This development, coupled with improved infrastructure, reduced transaction and transportation costs and improved the process of price discoveries at the primary market level which, in turn, helped small farmers having low-marketed surplus in a significant manner (APMC, 2006).

However, there are limitations and drawbacks involving constitution and implementation of the regulation. Some of the whole sale markets do not come under the sphere of the regulation. No precise data are available on the proportion of benefits of the markets reaching small and marginal farmers. The State Agricultural Market Boards varies broadly in their constitutions and functions. There is an uneven distribution of regulated markets across the country. Around 53% of the overall regulated markets were confined within the geographically large states of Andhra Pradesh, West Bengal, Madhya Pradesh, Maharashtra, Uttar Pradesh and Bihar. Productively large states such as Punjab and Haryana hold 9.5% of the overall regulated markets. Even with a relatively large number of market places, functionality remains a problem. Significant proportion of the markets remains non-functional. In the state of Andhra Pradesh, out of 889 regulated markets, almost 500 markets are either not functioning or with only little transactions. The infrastructural facilities remain outdated with no use of available technologies. There are spatial differences regarding market yards among states. Cleaning, grading and packaging of agricultural products prior to sale by farmers have not been promoted and facilitated by the committees. Cold storage units exist only in 9% of the overall regulated markets (APMC, 2006).

Food policy of India started at national level and the main goal was to achieve self sustenance of food grains. Later, it evolved into concentrating on household and individual level food security. Food security at both macro and micro level has been the focus of the agricultural development strategy ever since the start of the Green Revolution (Panda & Kumar, 2009). The strategy to improve the cereal production involved key elements, viz.:

1. Providing improved technology package to farmers and technical knowledge
2. Handing modern farm inputs and institutional credits to farmers and
3. Assuring profitable facilitation of marketing and pricing environment for farmers.

Several policy instruments were adopted to achieve the above mentioned objectives. With agriculture measures in place and a lot of emphasis being put on agricultural development in all the Five Year Plans (strategic plans for the overall growth of the country) of the Indian government and with the help of the government organizations such as Food Corporation of India and Commission on Agricultural Costs and Prices, the production of food grains increased from 51 million tonnes in 1950-51 to 257 million tonnes in 2011-12 (Acharya, 2009). The rice production increased almost five times since independence; from 20 million tonnes in 1950’s to 104.3 million tonnes in 2012. Better case with wheat production as it grew from 6.5 million tonnes in 1950’s to 93.9 million tonnes in 2012. As a result the per capita availability of food grains rose from 394.9 grams per day to 438.6 grams per day (Athreya, V.B. et al. 2008).

The public expenditure on agriculture and providing input subsidies have been the only major policy instruments of the Indian government on food security. The aggregate public expenditure on agriculture and food subsidies increased from around Rs.40000 crore in 1993 to around Rs.180000 crore in 2010. Resulting GDP from agriculture rose from Rs. 108374 crore in 1950-1951 to Rs. 485937 crore in 2006-2007. The public investment in agriculture as a percentage of agri-GDP stands at 3.4% whereas the investment in food subsidies stands at 17.2% (Acharya, 2009). This reflects the varied concentration of investments on the country’s food security. The recently proposed National Food Security Bill by the Indian government estimates the overall food subsidy expenditure to be around Rs.150000 crore (CACP, 2012). The Minimum Support Price (MSP) for procurement of food grains from the farmers by the government accounts for two-thirds of the economic costs of wheat and rice. Rising production costs, as a result of inflation, incurred an increase of MSP at a compound annual growth rate of 10.9% and 8.6% from 2007 to 2013, for rice and wheat, respectively (Acharya, 2009).

### 3.4.2. Food Security Safety Net Programmes in India

The Indian government formulated both long term and short term strategies toward achieving food security. The long term strategy involves maintaining sustainable growth in food production; improved employment and
income of masses and improving access to education and primary healthcare. Short term strategies revolve around selective market intervention on food grains and targeted distribution of subsidized food to reduce hunger and food insecurity (Athreya, V.B. et al. 2008).

According to government aided research, there has been a considerable improvement in physical access to food in recent times (Acharya, 2009). This is due to several factors – share of rice is evenly distributed across the country; expansion of the Public Distribution System; retail price increment of rice and wheat lower than the increase in per capita income. The price of wheat (100 kg) declined from 15.4% in 1973-74 to 4% in 2008, as a proportion of annual per capita income (rural) (Acharya, 2009).

In order to enhance and de-centralize food security, the Indian government initiated various welfare programmes. These programmes act as a medium to reach poor people and alleviate hunger among individuals.

The food security programmes implemented by the Indian government are:

a) Public Distribution System (PDS),
b) Supplementary programs such as Mid-day Meals Scheme (MDMS), Integrated Child Development Services (ICDS) and Antyodaya Anna Yojana (AAY) and
c) Food for Work schemes

3.4.2.1. Public Distribution System
The Public Distribution System (PDS) is a rationing process organized by the Indian Government for the distribution of food. Under this system, households are entitled for selected commodities at subsidized prices of specified quantities. The system can be traced back to 1937, as a rationing measure of food grains during wartime by the colonial government. After independence, until 1960’s, the coverage of the system remained within urban areas. Ever since the Green Revolution, the government decided to develop the PDS into a large scale mechanism for procurement and distribution of the food grains. Until 1966, the emphasis was only on stabilizing food prices at a low level to enable access to all sections of the society. Later, the Food Corporation of India was mandated to maintain buffer stocks, ensure price stability for consumers and involve in open market sales alongside the main interests of procurement and distribution. The commodities were distributed at the local level through Fair Price Shops (FPS) setup all over the country. In 1967, there were 114,200 FSPs across the country covering 280 million people. It enabled easy redistribution of food grains to the food deficit regions of the country (Swaminathan, 2009).

In 1982, the PDS was incorporated into the Essential Supplies Programme of the government, for expansion and to control the prices of food grains and to achieve equitable distribution among consumers, in order to reach the vulnerable section of the society. Consumer Advisory Committees were formed at district and town levels to inspect the functioning of the PDS (PEO, 2005). By 2006, the number of FPSs went up and was around 483,195 serving country’s population (Cheriyan, 2006).

The commodities are distributed through FPSs by providing ration cards to each household. All households with a registered residential address are provided with ration cards. But, the entitlements of the amount of food grains differ according to states.

The PDS served dual purpose of distribution of food grains and market stability of food grain prices. It was made possible through providing of subsidies to consumers and minimum support price to farmers. This led to the stabilization of macro-economy of the country compounding to overall economic growth (Jha & Srinii, 2001). Till 1997, with a universalized PDS in system place, the total cost of the entire system was less than 0.5% of the overall GDP of the country (GoI, 2006).

3.4.2.2. Targeted Public Distribution System
With the neo-liberal reforms, the Indian government started to revamp policies to facilitate economic reforms. Under these reforms, in order to reduce the fiscal deficit, the government increased issue prices of rice and wheat under the PDS. Even though, the distribution of food grains through the PDS accounts for only 10% of the total net availability of food grains, the government intended to raise the price of the essential commodities. Between 1991 and 1994, the issue prices of rice and wheat to the states increased by 85.8% and 71.8%
respectively. As a result, the food grains off take declined in most states. In addition to that, the PDS was criticized for being urban centric and not properly reaching the poor and the weaker section of the society. These problems led to the formation of Targeted Public Distribution System (TPDS) in 1997 (Athreya, V.B. et al. 2008).

Under the Targeted Public Distribution System, the beneficiaries are categorically divided into Below Poverty Line (BPL) and Above Poverty Line (APL) families. These classifications are based on the poverty line methodologies determined by the Planning Commission including the required consumption expenditure for 2400 calories/day (rural) and 2100 calories/day (urban) (Panda & Kumar, 2009). As per the poverty line, the prices assigned for food grains and the allotment for households differ for BPL and APL families. Initially, 10 kg of food grains per family per month were allotted for BPL families at subsidized prices. Later it was increased to 35 kg in 2002. Antoyodaya Anna Yojana (AAY) is another scheme with the PDS which covers 25 million poorest families in the country by providing them 35 kilograms of food grains at highly subsidized prices of Rs. 3/kg for rice and Rs. 2/kg for wheat.

The Planning Commission’s expert group estimated the number of BPL households countrywide and played the role in deciding the entitlements and their sizes for BPL households (Saxena, 2011). The control over the TPDS was centralized in a manner deflating the voice of state governments. The prices of wheat and rice were Rs. 234 and Rs. 289 (per quintal) respectively in 1990-91. By the year 2000, the price rose to Rs. 682 (wheat) and Rs. 905 for APL families while the prices remain unchanged for BPL households (Athreya, V.B. et al. 2008).

Before the inception of TPDS, the public distribution system was designed and managed by the respective state governments. According to each state, the entitlements, commodities offered and the retail pricing differed. The required allocations of food grains were demanded by the state governments from the central pool. Based on past records, the central government allotted the food grains for each state. With the TPDS, the central government decided the BPL families and the entitlements. The state governments were given the task of identifying the BPL families, issuance of ration cards and operational issues such as lifting of food grains from the central pool and distribution and supervision through FPS across the state. Around 60% of the fair price shops in the country are owned by private sector and the remaining by the local governments and state co-operatives. The role of FPS is to lift food grains from both central and state pool which differ among certain states (PEO, 2005).

With TPDS, the off take of food grains from the FPSs reduced significantly since the increased price of food grains for APL families brought level to the price gap between FPSs and private markets. Consequently, the PDS sales declined and the FPSs all over the country faced economic downturn. Only few states like Tamil Nadu and Andhra Pradesh that differ from TPDS were able to maintain profit since the price level of food grains for APL families were lesser than private markets (Athreya, V.B. et al. 2008).

Differing from the planning commission report, the state governments have identified more than 100 million families as BPL families, which constitute around 56% of the country’s population. But, the bill places a cap on BPL families at 46% (rural) and 28% (urban) (Srivastava, 2012).

3.4.2.2.1. Functioning of the TPDS

Since there are both food deficit and food surplus states in the country, the major role of the Food Corporation of India is procurement and redistribution of food grains and essential commodities. Apart from the FCI, some states also procure food grains through the “Decentralized Procurement Scheme”. Food grains thus obtained by the States may be used to contribute to the central pool of food grains or by the States themselves to augment its supply of food grains from the PDS or even sold to other States from their PDS through Open Market Sales operation. The procured food grains, both ready and buffer stocks, are stored in the warehouses managed by the FCI, Central Warehousing Corporation and the State Warehousing Corporations (Gol, 2005).

States that have expanded their PDS operations and cover more BPL families tend to suffice their additional requirements of food grains by dilution of allocated 35 kg for BPL families through reducing per household entitlements or purchase additional food grains from either the FCI or locally.

The food grains are transported from the central pool to the regional depots by the FCI. The transportation is generally through private contractors. The role of the FCI ends here (PEO, 2005).
At the state level, the lifting of food grains from the regional depots to the issue centre is done by the respective State Civil Supplies Corporation. The procurement of food grains from the central pool is performed every month by the State governments. From the State issue centres, FPSs lift their required food grains for distribution. Various agencies are involved in this process (Planning Commission, 2007).

The FPSs in every state perform the distribution process either in accordance to the central government norms or the state government norms (where expanded PDS is prevalent). In most states, where TPDS is being followed, food grains are distributed to both the APL and BPL families under the respective price tags. In the states with universal PDS, food grains are distributed at the prescribed prices by the state government. The proper functioning of the FPSs is inspected by the local governing bodies and concerned authorities (PEO, 2005).

The distribution of food grains from the FPSs differs with every State. Table (1) indicates the consumption pattern of food grains among selected states and people benefitting from the PDS.

<table>
<thead>
<tr>
<th>States</th>
<th>Percentage of households reporting consumption of rice and wheat among the consumer (MPCE) of bottom 30% and all classes from PDS in both rural and urban areas of selected states (2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rice</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bottom 30%</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>1. Andhra Pradesh</td>
<td>69.43</td>
</tr>
<tr>
<td>2. Assam</td>
<td>21.30</td>
</tr>
<tr>
<td>3. Bihar</td>
<td>1.24</td>
</tr>
<tr>
<td>4. Gujarat</td>
<td>49.75</td>
</tr>
<tr>
<td>5. Haryana</td>
<td>0.00</td>
</tr>
<tr>
<td>6. Karnataka</td>
<td>79.30</td>
</tr>
<tr>
<td>7. Kerala</td>
<td>67.93</td>
</tr>
<tr>
<td>9. Maharashtra</td>
<td>39.93</td>
</tr>
<tr>
<td>10. Orissa</td>
<td>31.91</td>
</tr>
<tr>
<td>11. Punjab</td>
<td>0.00</td>
</tr>
<tr>
<td>12. Rajasthan</td>
<td>0.00</td>
</tr>
<tr>
<td>13. Tamil Nadu</td>
<td>88.95</td>
</tr>
<tr>
<td>14. Uttar Pradesh</td>
<td>11.12</td>
</tr>
<tr>
<td>15. West Bengal</td>
<td>22.50</td>
</tr>
<tr>
<td>India</td>
<td>30.94</td>
</tr>
</tbody>
</table>

Source: NSSO Report No. 510, GoI, 2007b
3.4.2.2. Problems Pertaining to Active Implementation of the PDS

The PDS has always been under criticisms due to poor implementation and lack of proper structure. In the early 1990’s, one of the major criticisms was that the PDS was not cost effective. According to surveys conducted, the cost effectiveness of reaching the poorest 20% of the overall population was very small. For every rupee spent, less than 22 paise (cent) reached the poor people. Even though, the subsidy allotted to the Food Corporation of India rose from Rs. 2760 million (1980-81) to Rs. 6500 million (1989-90), there was only a marginal increase in the amount of food grains distributed (Cheriyan, 2006). This is mainly due to inefficiency of the Food Corporation of India. With the TPDS, the government aimed to bring down the fiscal deficit through modified distribution system with reduced subsidies. To the contrary, the subsidy for overall food security in India increased from Rs. 24500 million in 1990-91 which is 0.43% of the country’s GDP and reached Rs. 232,000 million in 2005-06. This accounts to 0.66 % of the country’s overall GDP. Also, diversion of food grains and illegal trading from the PDS to open markets has been major obstacles for proper implementation. According to the government estimation, nearly one-third of the total allotted food grains for public distribution was diverted and sold in open markets (Athreya, V.B. et al. 2008).

Since large scale food grain production is specific to certain states in the country due to geographical advantage, food grains are largely transported by the FCI from the food excess states to the food deficit states. This requires long transportation to fulfil the requirements. This leads to higher marketing costs for the FCI. There are also economic costs due to statutory and non-statutory charges paid to the state governments. Although the FCI access the subsidy fund to cover up the expenses and spend enough on the proceedings for the food to reach the poor, a significant number of poor people still are left out of the system. The food grains are not reaching certain vulnerable sections of the society due to disadvantageous geographical locations, purchasing power of the poor households, lack of communication regarding subsidies and improper infrastructure facilities. Also, poorer states in the country have relatively poor distribution system.

The Targeted PDS is not being implemented all over the country. Some states withdraw from the central system of TPDS and implement their own system. For example, Tamil Nadu implements a universal PDS and Andhra Pradesh provide additional subsidized food to the BPL families from the allotted food grains for APL families. With TPDS in place, apart from the subsidized allotment of 35 kg per family from the central pool, the rest will be sold to the states at APL prices. So, the states implementing a universal PDS need to bear additional costs (Athreya, V.B. et al. 2008).

The management of the excess food grains in the country has remained in an exigent state ever since the country faced surplus food grain production. In recent decades, there has been constant surplus food production in the country. But, most of the excess grains deteriorate due to lack of proper and adequate storage facilities [see Picture (6)]. Ironically, the centre’s expenditure on grain storage is more than what it spends on agricultural and rural development and irrigation and flood control together (GoI, 2002). The committee on long term grain policy, in 2002, estimates that about half of food subsidy expenditure was spent on holding excess food grain stocks. With excess stocks, instead of decreasing the issue prices for APL and BPL families, the government decided to dispose of it through exports of food grains at BPL prices. In the year 2002-04, the government exported 22.8 MT of food grains, which was a drought year in the country (Athreya, V.B. et al. 2008).

The targeting of the beneficiaries has also been at fault lines since its inception. The errors of targeting leave out those who are genuinely deserving of access to a particular programme (Swaminathan, 2003). There are two types of targeting errors; exclusion and inclusion error. The exclusion error tends to exclude the genuinely deserving people and the inclusion error refers to the inclusion of non-eligible persons or people in the programme. With a universal PDS, the exclusion was minimal since it covered all families irrespective of their economic status. Narrow targeting of PDS based on absolute income poverty is likely to have excluded a large part of nutritionally vulnerable population from the PDS (Athreya, V.B. et al. 2008). Table (2) indicates targeting errors in different states, attributed to the TPDS.

The exclusion errors include households that do not possess ration cards; poor households in possession of APL cards. An estimated 18% BPL families do not have ration cards. At the national level, more than half of agriculture labour households had either no ration cards or possess an APL card. 60% of the Scheduled Caste households in rural India were effectively excluded from the TPDS. Picture (7) represents the result of deserving people being left out of the system. According to the NSSO 2004-05 statistics, around 87% of rural India was unable to access food conforming to the 2400 kcal norm for a healthy life (Swaminathan, 2009).

Table (2): Targeting Errors

<table>
<thead>
<tr>
<th>States</th>
<th>Exclusion Error (% of households)</th>
<th>Inclusion Error (% of households)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>3.20</td>
<td>36.39</td>
</tr>
<tr>
<td>Assam</td>
<td>47.29</td>
<td>17.16</td>
</tr>
<tr>
<td>Bihar</td>
<td>29.81</td>
<td>12.20</td>
</tr>
<tr>
<td>Gujarat</td>
<td>45.84</td>
<td>9.78</td>
</tr>
<tr>
<td>Haryana</td>
<td>27.90</td>
<td>14.16</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>8.86</td>
<td>20.39</td>
</tr>
<tr>
<td>Karnataka</td>
<td>23.38</td>
<td>42.43</td>
</tr>
<tr>
<td>Kerala</td>
<td>16.28</td>
<td>21.04</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>19.61</td>
<td>12.49</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>32.69</td>
<td>11.11</td>
</tr>
<tr>
<td>Orissa</td>
<td>26.56</td>
<td>16.78</td>
</tr>
<tr>
<td>Punjab</td>
<td>7.75</td>
<td>12.33</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>16.73</td>
<td>5.22</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>-</td>
<td>49.65</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>26.75</td>
<td>13.25</td>
</tr>
<tr>
<td>West Bengal</td>
<td>31.74</td>
<td>10.23</td>
</tr>
</tbody>
</table>

Source: TPDS Evaluation, 2005

Also, pilferage and leakages at both central and local levels have been huge concerns in proper delivering of food grains. In 1999-2000, around 10% of rice and almost 49% of wheat allotted for the PDS have been diverted. Between 1999 and 2005, the leakages from the PDS at the all India level increased from 24% to 54%. In 2007-08, the overall diversion of the PDS grains was 44%. This is being credited to various defects in the administration system (Khera, 2011). At the initial stage of the process, there remain discrepancies in the data pertaining to the off take of food grains reported in the Monthly Food Grain Bulletin issued by the central government and the data provided by the state governments. But, the reasons for the discrepancies are not clear. Secondly, there are gaps in the estimation data provided by the central government on food grain distribution. Estimates on transport and leakage losses are not available; basic information on coverage of the scheme and entitlements for each state are not compiled accurately at the central level. Data on states’ contribution to the PDS are also not readily available and there is no simple way to find out states that augment FCI allotments with their own purchases from the open markets to run the universal PDS. Moreover, the Monthly Food grains Bulletin which was available on the Dept. of Food and Civil Supplies until 2005, no longer available for public access (Khera, 2011). Table (3) and table (4) show the leakage of food grains among selected States in the country as per the evaluation studies conducted on the performance of the TPDS.
Table (3): Total Leakage

<table>
<thead>
<tr>
<th>States</th>
<th>Abnormal Leakage (more than 75%)</th>
<th>Very High Leakage (50% - 75%)</th>
<th>High Leakage (25% -50%)</th>
<th>Low Leakage (less than 25%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bihar &amp; Punjab</td>
<td>Haryana</td>
<td>Madhya Pradesh &amp; Uttar Pradesh</td>
<td>Assam, Gujarat, Himachal Pradesh, Karnataka, Maharashtra &amp; Rajasthan</td>
<td>Andhra Pradesh, Kerala, Tamil Nadu, Orissa &amp; West Bengal</td>
</tr>
</tbody>
</table>

Source: PEO, 2005

Table (4): Leakage at FPS Level

<table>
<thead>
<tr>
<th>States</th>
<th>Very High Leakage (+50%)</th>
<th>High Leakage (25% - 50%)</th>
<th>Moderate Leakage (10% - 25%)</th>
<th>Very Low Leakage (less than 10%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bihar, Haryana &amp; Punjab</td>
<td>Rajasthan &amp; Uttar Pradesh</td>
<td>Andhra Pradesh, Gujarat, Karnataka, Kerala &amp; Maharashtra</td>
<td>Assam, Himachal Pradesh, Madhya Pradesh, Orissa, Tamil Nadu &amp; West Bengal</td>
<td></td>
</tr>
</tbody>
</table>

Source: PEO, 2005

3.4.2.3. Mid-Day Meal Scheme

The government of India launched the National Programme of Nutritional Support to Primary Education, popularly known as Mid-Day Meals Scheme in 1995. The main objectives of the programme are to enhance universalizing primary education in the country by increasing enrolment, retention and attendance of children from poor communities and simultaneously bring a positive impact on the nutritional status of the students in primary classes (GoI, 1995). The history of the programme can be traced back to 1925 when the then Madras Corporation launched the free meals programme for poor school children. Similar feeding programmes were started in Kolkata (1927), Kerala (1941) and Bombay (1942). Post independence, the noon meals scheme was first introduced by the Tamil Nadu government in 1958 covering over 200,000 children through 8000 elementary schools across the state. By 1982, the TN government announced a de-centralized noon meal scheme providing food to all school attending children in the primary classes. By mid 1980’s, other states such as Kerala and Gujarat initiated this scheme and by 1990-91, 12 states in the country started to feed children through this programme. This led to the central government starting a national wide feeding programme in 1995 (MSSRF, 2010).

Under this scheme, meals were provided to children in class I-V in all government and government aided schools. With the provision of free meals, the number of children under MDMS rose from 103 million in 2001-02 to 119 million in 2005-06. According to 2009-10 statistics, the scheme covers around 120 million children in over 0.95 million schools around the country and accordingly, the world’s largest school feeding program. This incorporates 84 million children in primary schools and 33 million children from secondary schools (Deodhar, et.al, 2012). In 2004, the Supreme Court of India ordered every state to provide a minimum of 300 calories and 8-12 grams of protein each day for every student for a minimum of 200 days under the MDMS. The government’s guidelines in 2006 increased the calorific value to 450 each day. To facilitate the scheme, the central government allotted 100 grams of grains per day per child and Rs. 50 per quintal of grains as transportation costs. The total assistance per child per day stands Rs. 2.21 by the central government (Athreya, V.B. et al. 2008).
MDMS facilitate primarily the abolition of classroom hunger [see Picture (8)]. Many Indian children reach school every day on an empty stomach in the morning, as early morning breakfast is not part of household routine. In general, the MDMS protects children against hunger in the poorer regions. This contribution is immense when it comes to food security in tribal areas where hunger is endemic. MDMS can also help to break barriers of caste discrimination and promote egalitarian values among children (Dreze & Goyal, 2003).

Table (5) indicates the amount of people benefitting from the MDMS across different social groups and class wise differentiation in both rural and urban areas in the country.

**Table (5): Families with at least one member benefitting from MDMS**

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>% of families with at least one member benefitting from MDMS among different social groups 2004-05, country level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>28.8</td>
<td>9.00</td>
</tr>
<tr>
<td>SC</td>
<td>25.30</td>
<td>11.80</td>
</tr>
<tr>
<td>OBC</td>
<td>22.10</td>
<td>10.7</td>
</tr>
<tr>
<td>Others</td>
<td>19.10</td>
<td>4.80</td>
</tr>
<tr>
<td><strong>% of families with at least one member benefitting from MDMS, MPCE class wise 2004-05, country level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom 30%</td>
<td>33.40</td>
<td>19.52</td>
</tr>
<tr>
<td>Middle 40%</td>
<td>24.68</td>
<td>7.80</td>
</tr>
<tr>
<td>Top 30%</td>
<td>12.58</td>
<td>1.07</td>
</tr>
</tbody>
</table>


But, the scheme faces stern resistance in certain regions, for varied reasons. For many years since its induction, states have been facing financial difficulties in implementing the scheme. States face financial constraints in mobilising the resources for cooking the meal. Initially, the states were asked to segregate certain amount for the scheme from the finance provided for poverty alleviation by the central government. Later, in 2003, the Planning Commission asked the state to earmark a minimum of 15% of additional central assistance on welfare schemes for implementing MDMS. Universalizing the schemes proved difficult since many states could not provide adequate infrastructure to facilitate the scheme and many have not implemented the scheme at all (Athreya, V.B. et al. 2008). The central assistance to meet the cooking costs is less than the actual requirements. The outlay of Rs. 94,400 million for 2010-11, which is an 18% increase of the previous year’s allotment seems modest with the current inflation. This led to a difference in allocation and off take of food grains for the scheme. Also, the cost estimates for implementation tend to change due to inflationary pressures in the economy.
Another major weakness has been the inadequate involvement of grass root level structures and the elected local bodies. There are instances of caste discrimination as well with the MDMS. In a village in the state of Rajasthan, children from the SC community were forced to drink water from separate pitchers. In the states of UP and Bihar, which hold significant amounts of SC and ST communities, SCs and STs are being denied access to MDMS by refusal to implement the scheme. The appointment of SC cooks for the scheme faces resistance from the upper caste people and parents and practice of segregated seating and meals are prevalent. Also, the scheme does not cover the left out children from schools (Dreze & Goyal, 2003).

3.4.2.4. Integrated Child Development Services

The Government of India launched the National Policy on Children in 1974, declaring children as „supremely important asset”. The Integrated Child Development Services (ICDS) started as a pilot project in specific States among selected communities. The main objective of this scheme is to improve the nutritional status of the children of age group 0-6 years and to reduce malnutrition, morbidity and school dropouts. This scheme provides various services including supplementary nutrition to pregnant and lactating mothers and children for 300 days a year. Under this scheme, children of the age group 0-6 are provided with 300 calories of food every day and it doubles for severely malnourished children. This is facilitated at the local level through government aided Anganwadi Centres (AWC). By 2006, there were 668,954 AWCs all over the country serving a total of 56,218,108 people. The government’s allocation for the scheme stood at Rs. 116,845 million in 2007 (MSSRF, 2010).

But, there are obstacles in proper implementation of the scheme. As per 2001 census, 157 million children (0-6 age group) were covered under the supplementary nutrition programme in ICDS which is only 30% of all children in the country. Even though, the number beneficiaries increased to 51% in 2006, there is still a huge population left out due to administrative and structural problems (Athreya, V.B. et al. 2008).

Around 46% children in India under the age of 3 are underweight. This situation is much worse compared to relatively poorer regions such as sub-Saharan Africa where it stands at 30% and the neighbouring countries Pakistan and China at 37% and 8% respectively. The Indian country hosts 57 million children out of the world’s 146 million children that are malnourished. NFHS-3 survey conducted across the country estimated 80% children in the age group of 6-35 months are anaemic and one in three are stunted (Athreya, V.B. et al. 2008).

3.4.2.5. Food for Work Scheme

The Food for Work programme was started in 2001 as part of the Employment Assurance Scheme (EAS) by the central government in eight drought affected states in the country to provide assistance to poor people in rural areas to overcome their hunger by creating work opportunities. India’s rural public works programme in one of the largest such programs in the world. The objective of the programme is to provide supplementary wage employment and thereby provide food security. The programme is open to all rural poor in need of wage employment and desired to do manual and unskilled work in and around the locality. The aim of the programme is to provide at least 30% of the employment opportunities to women. 22.5% of the total annual allocation under the programme is earmarked for schemes benefitting SC/ST families living below poverty line (Planning Commission, 2007).

The work is usually related to projects based on infrastructure development, environmental conservation and activities related to economic sustainability. The programme is implemented by the local governing bodies called „Panchayati Raj” and these governing bodies assign contractors to perform the tasks. The wage is provided both in the form of food grains and money. 5kg of food grains is provided per man-day and the remaining part of the wage as cash. The mode of payment varies depending on the availability of food grains and cash (Planning Commission, 2007).

But, the programme is plagued with several problems. Firstly, the resources allocated are diluted to increase the coverage of the programme to a larger extent without any concern for the duration of employment provided. Secondly, projects proposed and implemented do not relate to or fulfil local needs and the strategic policies to augment agricultural development. A study in the state of Uttar Pradesh indicates that work timings of these projects coincided with peak agricultural seasons, since most people benefitting from these projects are poor peasants and agricultural labourers. This creates a conflict of interest among rural poor. Nonetheless,
programme is full of corruption with the contractors and other authorities involving in fudging of muster rolls and measurement books. Maharashtra is the only Indian state succeeded where the programme has reduced unemployment and increased the incomes of many participating households (Saxena, 2011).

With different states in the country implementing the food safety net programmes to their own preferences and personal agendas, the overall performance differs with every State. Since, this paper is about analysing the performances of India and the State of Tamil Nadu in food distribution system, it is appropriate to have a look at the performance of Tamil Nadu state in order to compare and analyze the performance issues.

3.5. TAMIL NADU’S PUBLIC DISTRIBUTION SYSTEM AND OTHER FOOD SECURITY SCHEMES

The state of Tamil Nadu is located in the southern part of India with coast along the Indian Ocean. It is the eleventh largest state in India and seventh most populous state in the country with a population of more than 72 million and ranks sixth in the Human Development Index among the states in India. Chennai, formerly called Madras, is the capital city of the state and is the fourth largest city in India. Picture (9) shows the location of the state. 44% of the state’s population live in urban areas which is the highest in India. Almost 22% of the total population belongs to the Scheduled Caste community. The state is one of the most literate in the country with around 80%. The state is the second largest contributor to the country’s GDP and is the second most industrialized state in India. Tamil Nadu is one of the prominent producers of agricultural products in India and is the fifth largest rice producer in the country. The gross cropped area accounts for around 39% of the state’s total geographical area (DFCP, 2013).

Though, the State is a major contributor to the country’s economy and performs better in various fields, poverty remains a situation to be addressed. In 1983, 53.48% of the population were below poverty line in the State whereas, in 2005, it has come down to 28.31%. It is a significant difference in percentage but, the absolute number remains high with almost 19 million people below poverty line. The Gini coefficients of the Sate remain more or less the same since 1983. In 2005, it was 32.09% (rural) and 35.84% (urban) (Dev& Ravi, 2007). To eradicate poverty, the State has been implementing various projects with assistance from the World Bank.

![Tamil Nadu state map](https://example.com/tamil-nadu-map.png)
3.5.1. PDS in Tamil Nadu

The state of Tamil Nadu has been at the forefront in food security measures and social welfare schemes. The state holds the constitutional food policy of ensuring adequate supply of essential commodities of acceptable quality at an affordable price to the general public, especially poor. The state stands unique among all other states as it went against the central government’s norm of targeted PDS (Athreya, V.B. et al. 2008). The state still runs a universal PDS with no APL and BPL classification. Each and every household in the state with a ration card are entitled to specific amounts of food grains at subsidized prices, along with sugar, pulses and kerosene. Every household is provided with a total of 20kg of rice per month at the rate of Re. 1/kg (since 2008) as against the central government’s rate of Rs. 5.65/kg for BPL families and Rs. 8.30/kg for APL families. The State serves more than 19.7 million card holders through the PDS. 31,439 FPSs are setup in 32 districts across the state for the distribution of essential commodities (Radhakrishnan & Vydhianathan, 2010).

There are three agencies that control the food distribution mechanism in the state. They are,

- a) Department of Civil Supplies,
- b) Tamil Nadu Civil Supplies Corporation (TNCSC) and
- c) Registrar of Co-operatives.

The State is in the context of running the FPSs. No private FPSs are allowed in the state. All of the FPSs are managed by the TNCSC, co-operative societies and self-help groups (SHG). The Co-operative sector runs 96% of the FPSs and the remaining by the TNCSC and SHGs. The TNCSC is responsible for procurement of food grains and other essential commodities from the FCI and stocks commodities through owned and hired operational and buffer warehouses up till the district level. The commodities are then distributed to the lead societies such as co-operative societies. The lead societies lift the food grains from TNCSC warehouses and issue them to the link societies such as agriculture co-operative banks and primary co-operative stores which run the FPSs. There are also mobile FPSs in the state to offer service to the people in remote areas. Since the staple diet of south Indians consists primarily of rice, rice procurement is the major objective of the state (PEO, 2005).

As the State implements a universal PDS, the central allotment for the BPL families does not satisfy the required amount of food grains. To overcome the shortage, the State government reduced the central government norm of 35 kg per BPL household. The State distributes a maximum of 20 kg per households to the families that hold a ration card. Also, the State government procures food grains from the central pool sold at APL prices as well as buying it from other states through open market sales (PEO, 2005). The monthly off take of rice under the PDS was 317,000 tonnes in the state, but the central government allotment was only 296,000 tonnes. The additional quantity was procured from the open market sales schemes of the FCI and from other states. This costs the state’s exchequer additional expense since food grains are distributed at further reduced subsidized prices. From Rs. 7348 million in 2003-04, it went up to Rs. 40000 million in 2009-10 (Radhakrishnan & Vydhianathan, 2010).

The State possesses 310 warehouses spread across districts to store food grains procured from various sources. Six months of food grains and other essential commodities are usually stored in the warehouses to cater the needs of the PDS. Transportation of food grains to the FPSs are generally done with trucks strictly controlled by route charts and the details of the commodities loaded and the destination. Control rooms are operated in all districts to check diversion of food grains. Officials from the concerned departments assist the trucks to monitor safe reaching to the destined place. As a trial measure, GPS have been installed in some trucks to track the movement. To have precise information of the stocks, an SMS based stock monitoring system is in place controlled by the co-operative department at FPSs and the stocks are checked and updated on a daily basis by the officials. In the capital city, Chennai, handheld billing machines with GPRS are available in all FPSs to monitor sales and stocks (Radhakrishnan & Vydhianathan, 2010). All FPSs possess electronic weighing machines and the State government has an effective online redress system in place to listen to public grievances. Tamil Nadu is probably the only state in the country that has a system for tracking sales at the PDS outlets. Tamil Nadu has been a pioneer as far as computerization of stock holdings down to the ration shop level (Khera, 2011).

Another unique feature of the State in the PDS system is the extension of cash credit facility through District Central Co-operative banks to the lead societies. The lead societies are allotted a certain amount everyday on the basis of per ration card. After the distribution of the commodities to the FPSs through the link societies, the lead societies prepare credit bills under the name of the link societies and submit them to the co-operative bank. The bank debits the accounts of the link societies on a day to day basis and the daily FPS sale proceedings are
remitted by the link societies in their cash credit accounts held in the district central co-operative banks (PEO, 2005).

With the universal PDS in place, the performance of the state stands out compared to the other states in the country. The universal PDS in the State covers almost 75% of the total rural population. The percentage of households benefitting from the PDS in the context of rice consumption, among all classes of the society, was around 79% (rural) and 48% (urban), respectively. The bottom 30% of the population consumed more food grains compared to the other sections of the society. Almost 89% (rural) and 78% (urban) accessed rice from the PDS. Though, wheat is not the staple food of the State, the consumption pattern remained significant. The overall consumption was at 31% (rural) and 11% (urban). 40% (rural) and 10% (urban) of people from the bottom 30% of the society consumed wheat (Athreya, V.B. et al. 2008).

Since there is a universal coverage of PDS, the exclusion error has been null, though inclusion error benefits irrelevant households. The inclusion error, stood at 49.65% in the year 2005. Also, due to better administration, the leakages and diversion of food grains are relatively low compared to other states. The overall leakages were below 25% and the leakage at the FPS level was below 10%, according to 2005 statistics. In 2008, the overall diversion of PDS grains in the state was 4% (PEO, 2005) (Khera, 2011).

Farmer’s suicide is common in poor regions of the country where as in the state of Tamil Nadu, universal PDS is one of the reasons for the non-occurrence of farmer’s suicide. In general, a poor rural family in the State depends on the PDS for about 90-120 days spread across a year. Also, the agricultural labourers receive their wages in kind also, usually cereals. This helps food security in poor households for a significant time in a year (RGF, 2006).

The success of the program can be attributed to various factors. A minimal diversion of food grains happened as a result of innovative fool proof delivery mechanisms, technological interventions, constant reviews and checks and responsibility and accountability at each level. The awareness about the PDS and food entitlements is widely prevalent in the state compared to the northern states of the country. In Tamil Nadu state, even uneducated people are clear of their entitlements and knew how to obtain them. The women have a better role in the society and they are the prime movers of social services in the State. There are a lot of active SHGs run by women in the State and some of those SHGs run FPSs also. The Panchayati Raj system (local governing bodies at the village level) in Tamil Nadu state is successful since the local body is the executive head and can take decisions in their own. There is no need for any bureaucracy in decision making aspects (Khera, 2012).

Also, political involvement in social measures has been a significant factor for the better performance of the state. In Tamil Nadu, there are two major political parties that have been in power ever since India got the independence. The codes and ideals of both the parties are based on anti-communal, anti-caste sentiments and are predominantly socialist parties (Nalankilli, 2005). Besides, vote bank politics too tend to offer better social services and provide essential commodities at cheaper prices. Since, women in the State have better education and aware of entitlements, political parties are pushed to pay attention to women’s voices. There are instances where the election results were influenced by the political parties’ actions toward food measures (RGF, 2006).

### 3.5.2. Performances of MDMS and ICDS Schemes

Tamil Nadu is the pioneering state in the MDMS program. The then Madras Presidency initiated the process of feeding school children in the Madras city in 1923. Later, in the 1960s, the scheme got expanded to a larger scale. In 1982, the scheme was universalized and provided food to children at the pre-school level, within the age group of 2-5 years and primary school children within the age group of 5-9 years. Since there were significant improvements in the children’s health and school attendance, it got expanded to cover children up to 15 years of age in 1984. A meal everyday is provided all 365 days in a year for pre-school and primary children. For children within the age group of 9-15 years, noon meal is provided for around 220 days (school working days) in a year (Athreya, V.B. et al. 2008). In 2009, there were 41,663 noon meal centres all over the State (39,853 in rural areas and 1810 in urban areas) feeding school attending children through this programme. During 2006-07, the State spent Rs. 2886 million under the scheme covering 5,498,309 students (MSSRF, 2010). Table (6) shows the statistics of the number of families benefitting from MDMS in Tamil Nadu.
Unlike other states, the state of Tamil Nadu has a separate nodal agency called Social Welfare & Nutritious Noon Meal programme department that manages and functions the MDMS. In most other states, the MDMS comes under major departments like education, civil supplies or women and children development. Under this nodal agency, the state government provides raw materials to noon meal centres to cook the meal. Except vegetables and condiments, all other commodities are provided by the state government. The materials are transferred to the meal centres were the food is prepared and served. Every school has a noon meal centre with designated cooking staffs. In fact, Tamil Nadu is the only state to appoint regular staff on a fixed monthly remuneration for cooking and serving food. The State tops in the context of nutritious food provided. A proper menu is followed with eggs provided thrice in a week and the quality of the food is better than other states. Food is served on time with often no complaints of delay and irregularities. The programme is monitored at the state level by a Steering-cum-Monitoring Committee to ensure proper implementation. At the local level, the municipal and village bodies monitor the program along with SHGs and also parents (MSSRF, 2010).

The Tamil Nadu government initiated the Integrated Child Development Services scheme in 1976 in three blocks, namely urban, rural and tribal. The nutrition study conducted in the state in 1970s indicated that poverty is not the only reason for malnutrition. There were families with adequate calorie intake, but still children under 2 years suffering from malnutrition. This led to the initiation of the Tamil Nadu Integrated Nutrition Programme (TINP) in 1980. The programme not only involves providing supplementary nutrition but also educate the mothers about healthcare and nutrition. The TINP focussed primarily on children under 6 years and in 72 months since its inception, the percentage of severely malnourished children dropped significantly (Athreya, V.B. et al. 2008). In 1990, 4.2% and 29.6% children were severely and moderately malnourished respectively. There was a huge reduction in the past couple of decades in the amount of malnourished children. By 2010, it came down to 0.03% (severely malnourished) and 1.62% (moderate malnourished) (GoTN, 2010).

The TINP had unique features compared to ICDS in the manner of providing supplementary nutrition to selected children for a specific period, thrust on awareness and communication through regular campaigns and programmes and assigning special instructors for monitoring and training. In 2005, all the TINP centres were brought under the ICDS programme to run under Centre-State collaboration. In 2010, there were 54,439 operational Anganwadi Centres present in the State benefitting 2,448,356 people all over the state (MSSRF, 2010).

The State performs better in implementing the ICDS compared to other states. Tamil Nadu is the only state with effective PSE (pre-school education) that is part of the ICDS. 89% of the mothers interviewed, reported that PSE activities are functioning properly at the Anganwadi centres (AWC). Moreover, Tamil Nadu is the only state that provides good salary for the Anganwadi Workers (AWW). AWW in Tamil Nadu are the highest paid in the country. This is due to higher financing from the state government on the ICDS projects. At the all India

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Table (6): Families with at least one member benefitting from MDMS in Tamil Nadu

<table>
<thead>
<tr>
<th>% of families with at least one member benefitting from MDMS among different social groups 2004-05, country level</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>31.8</td>
<td>22.10</td>
</tr>
<tr>
<td>SC</td>
<td>41.10</td>
<td>24.20</td>
</tr>
<tr>
<td>OBC</td>
<td>29.10</td>
<td>15.40</td>
</tr>
<tr>
<td>Others</td>
<td>07.10</td>
<td>03.80</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of families with at least one member benefitting from MDMS, MPCE class wise 2004-05, country level</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom 30%</td>
<td>49.61</td>
<td>38.60</td>
</tr>
<tr>
<td>Middle 40%</td>
<td>36.29</td>
<td>16.68</td>
</tr>
<tr>
<td>Top 30%</td>
<td>15.49</td>
<td>01.33</td>
</tr>
</tbody>
</table>

Source: NSSO Report No. 510, GoI, 2007b
level, very low salary of AWWs and a lack of recognition as full-fledged workers in their own rights are bottlenecks in the effective functioning of the AWWs. Also, the nutritional value of the food provided by the State is the highest in the country. Menus with different meals are prescribed and followed by the AWCs and nutritious food is served without any delay (MSSRF, 2010).

But, even though, the State performs better in these programmes compared to other States in the country, the State is also facing problems with a considerable amount of people being left out of the programmes due to operational and administrative changes. There is a need to expand the system through improved services and managerial modifications for better access of the system (MSSRF, 2010).

4. RESULTS

4.1. PERFORMANCE ANALYSIS – INDIA AND TAMIL NADU

The main objective of food distribution through welfare schemes is to alleviate hunger among the poor section of the population. Although the food distribution system through welfare measures was initiated and implemented all over the country as national schemes, the administrative and operational mechanisms differ between some of the States. Consequently, performances of the States also differ in regard to their efficiency in implementing the schemes.

The major scheme to alleviate hunger in the country is the Public Distribution System (PDS). It is the largest subsidized food distribution in the context of number of people covered. The system was started as a universal programme, post independence across the country. Since then, it has undergone changes to facilitate policies enacted under various governments. The performance of the PDS at the national level, according to the 2005 evaluation report, shows that both in rural and urban areas, the consumption of food grains, i.e. rice and wheat differs among people from different classes (based on MPCE level) and castes. Reasonably, most of the people coming under the bottom 30% of expenditure category are also from the lowest castes of the society.

According to Monthly Per Capita Expenditure class wise, at the country level, the percentages of households consuming rice in rural areas were 30.94 (bottom 30%) and 24.4 (overall). In urban areas, the percentages were 25.67 (bottom 30%) and 13.10 (overall). In the case of wheat consumption, the percentages were at 15.10 (bottom 30%) and 11.42 (overall) in rural areas; 11.50 (bottom 30%) and 5.80 (overall) in urban areas.

In comparison, percentages of rice and wheat consumption in the State of Tamil Nadu stood at 88.95 & 40.5 (bottom 30%) and 78.9 & 30.17 (overall) respectively in rural areas; in urban areas, the rice and wheat consumptions were 77.74 & 10.31 (bottom 30%) and 47.7 & 10.71 (overall) respectively.

Also, the targeting errors in reaching deserving and appropriate people under the subsidized scheme remain high in the country. The exclusion error, where deserving people are left out of the scheme was at 18% in the country, according to official estimates, whereas the exclusion error was nil in Tamil Nadu state. According to academic studies relevant to evaluation of targeting errors, in most of the States across the country, more than 60% of the population was excluded from the PDS, with either no cards or under the APL category. This includes 52% of agricultural labour households and 60% of Scheduled caste households. The inclusion error (people not eligible for subsidies) was high in Tamil Nadu at 49% (highest in the country). Leakages and diversion of food grains from the PDS all over India was at 44%, In Tamil Nadu, it was 4%. In the economic front, Tamil Nadu bear additional costs, as it offers universal PDS, which results in entitlements irrespective of the status of the families.

The Mid-Day Meal Scheme initiated to feed all school attending children has improved school attendance and there has been a reduction in the number of malnourished children as a result. But, this is not the case in all States. The overall performance of the country is well below the performance of Tamil Nadu. The families benefitting from the scheme at both national level and Tamil Nadu were as follows:

<table>
<thead>
<tr>
<th></th>
<th>India</th>
<th>Tamil Nadu</th>
</tr>
</thead>
<tbody>
<tr>
<td>(bottom 30%)</td>
<td>33.4% (all)</td>
<td>49.61% (all)</td>
</tr>
<tr>
<td>(overall)</td>
<td>22.8% (all) [rural]; 19.52% (all) [urban]</td>
<td>31.80 (all) [rural]; 38.6% (all) [urban]</td>
</tr>
<tr>
<td>(bottom 30%)</td>
<td>8% (all) [urban]</td>
<td>15.6% (all) [urban]</td>
</tr>
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</table>
Similarly, with the Integrated Child Development Services (ICDS) scheme, the performance of Tamil Nadu is better than the national level performance. The study shows that around 80% of children within the age group of 6-35 months are anaemic. But the scheme covered only around 50% of children within the mentioned age group, at the national level. In Tamil Nadu, the percentage of severely and moderately malnourished children was reduced drastically to fewer than 2%.

5. DISCUSSION

The statistical analysis shows that Tamil Nadu performs better than the other states in the food distribution system when compared to the overall performance of the country. There are differences not only in the performances between the country and Tamil Nadu, but also in regard to structural and operational mechanisms. While at the national level, the Targeted Public Distribution System has been in practice since 1997, Tamil Nadu withheld from targeting the beneficiaries and maintained a universal PDS. The Fair Price Shops (FPS) that distribute the food grains to the beneficiaries are run mostly by private owners at the national level but in Tamil Nadu, FPSs are controlled by the state civil supplies corporation and co-operatives run by the government and women SHGs. There are also mobile FPSs to cater to people in remote areas. Credit facilities are provided to the FPS owners for better facilitation of the scheme. Tamil Nadu has better infrastructure with adequate warehouses to store excess food grains and is the only state to have tracking system to monitor the functioning of FPSs (PEO. 2005). GPS installed trucks and GPRS billing machines are present to monitor and curb diversion of food grains. As a result, loss of food grains due to pilferage and leakage has been minimal. Better administration with constant invigilation of the programme, general awareness of the scheme among poor people and active redress system are present in Tamil Nadu. For the rest of the country, however, the study shows that there is no proper administration in most other States generally and FPSs are not operated regularly. There is no accountability among officials and pilferage and diversion are rampant. A significant amount of poor people are unaware of their entitlements and most of the time at the mercy of the FPS owners (Dreze, 2003).

Similar results are evident with MDMS and ICDS schemes where Tamil Nadu stands ahead of the national performance. Tamil Nadu is the only state where all government schools and ICDS centres are reported to have separate cooking centres and assigned cooking staffs to provide meal for the kids. Good administration, proper remuneration for workers and other related operations make Tamil Nadu perform better compared to the national level performance.

Involvement of SHGs in the social services and active influence of political parties on the schemes are predominant in Tamil Nadu which is not the case in most other States. New and innovative steps are taken, for example, the cash credit facility, GPS tracking system, etc., to improve the food programmes, thereby making the programs cost effective without considerable losses and leakages.

Like most other reports and studies conducted on the PDS and other food distribution measures in India, this paper analyses the performances of the food distribution through welfare measures. Apart from statistical analyses, the issues pertaining to the actual implementation of the programmes are taken into consideration as well. As the results show that the schemes were initiated through proper understanding of poverty and hunger issues, lack of efficiency and effectiveness of the schemes are likely to be the result of basic administrative and operational negligence among both central and state governments and bureaucrats responsible for managing the schemes (Athreya, V.B. et al. 2008). Even with adverse results, when considering the years these programmes have been in operation, the results provided are not constant throughout the country. A few states perform much better than most other states in the country and more often than not, comparing between better performing States and poorly performing States has not been done in a reasonable and elaborate manner. This paper does not do a detailed analysis of all States, but concentrates on comparing the country’s overall performance with the performance of Tamil Nadu. The paper also looks into the qualities that could be an impetus for a better administration and operation of these food security programmes.

The study shows clearly that conformity is lacking between different official committee reports and academic evaluations on poverty and hunger in the country. Methods to estimate poverty and carry through the Below Poverty Line (BPL) census have been under the scanner ever since the launching of the Targeted PDS. The methods applied for estimating the number of poor have been criticized for being complicated. They are based on the absolute poverty line methodology followed by the Planning Commission to assess poverty in the
country. Agricultural labourers and farmers constitute a major portion of the poor in the society and their incomes are variable. Since the methodology follows an absolute expenditure level for assessment, there is a greater window to exclude large, vulnerable sections of the society. Also, the BPL census methodology is based on 13 various indicators and in a country where most poor people have variable incomes and live with chronic hunger, it seems better to stick with a universal scheme (Cheriyan, 2006). Because, with targeting comes errors. Inclusion errors lead to fiscal costs due to ineligible beneficiaries, whereas exclusion errors lead to welfare costs. Measurement and management of fiscal costs are easily performed compared to assessing welfare costs. The reason for the Targeted PDS is to curb fiscal deficits by targeting poor people due to increase in government’s expenditure on welfare measures. But, in spite of targeting, the reality is that the country’s GDP share on welfare measures has increased since the launching of the TPDS. In the context of economy, Tamil Nadu faces a similar situation as well with additional spending on universal PDS, but one cannot deny the fact that more deserving people get access to food grains when compared to other states with the Targeted PDS. Also, it is clear that the Targeted PDS has led to less procurement of food grains by the States from the FCI alongside with food grains being wasted for lack of proper warehouses with implicit additional costs due to poor health and malnutrition that are passed on through generations. For all these reasons, the country is likely to face difficulties in its overall growth (Athreya, V.B. et al. 2008).

The structural problems created through different pricing of same commodities under targeting method have been the breeding ground for malpractices and corruption among bureaucrats and traders. This is evident from the studies conducted on food distribution measures. This happens even in schools, as food grains allotted for MDMS programme have been looted. Saxena, 2011, in his report, stated that “PDS is plagued with structural problems including endemic corruption”. Next, operational and management techniques applied have not been fruitful in achieving the target of reducing hunger in the country. Private FPSs across the country have not functioned properly as most of the rural poor have very limited access to these shops. Such irregular functioning could be the result of neglectful management. Laws have been enacted but enforcement and monitoring of the laws need proper administration. Improper assessment, lack of transparency and absence of accountability are major drawbacks and in turn, show the indifference of the State governments (Cheriyan, 2006).

In Tamil Nadu, the operation and management systems that take responsibility and accountability for the actions towards food distribution and proper monitoring with help from technology are clear factors that influence positive outcome of the welfare measures. Operation of FPSs by local governmental societies and SHGs, tracking systems, innovative and indigenous ideas and most of all, proper dissemination of information about welfare schemes, subsidies and entitlements, especially among women, make the system function effectively (Dreze, 2003). Women empowerment could play its part as evident from the fact that women in Tamil Nadu are actively involved in social services. But, the adverse social conditions prevailing, especially among the northern states of the country, that are in fact poorer states, provide stern resistance for the effectiveness of welfare schemes. Caste system and gender subjugation are deeply entrenched in the culture and the society (Swaminathan, 2009). Such inequalities are very much alive in Tamil Nadu as well, but interestingly, such stigmas do not seem to affect the welfare measures in the State. A detailed study on this issue will be interesting.

The paper does reflect on the statistics and performance based issues of the food distribution system, but the statistics are acquired mostly from the official committee reports put out by the government. Comparisons in this paper use academic studies on the relevant issues, but the core analysis and discussions are based on the official statistics. It is clear from the analysis that the official reports do not always match other studies. Of course, there is therefore a possibility that the statistics acquired do not adequately reflect the real situation of the country regarding food distribution system. Still, using the official reports has been considered justified, since they build the platform to further the government's approach to the issues under study. The ground reality can be validated only through personal interviews and relevant field work which is out of scope of the present study. Also, the focus of the paper is on the positive aspects of Tamil Nadu’s food distribution system, without really considering possible negative aspects. This might be seen as a weakness of the paper. On the other side, the intention is to look for possible explanations of Tamil Nadu's better performance. Such explanations are unlikely to be found among the negative aspects of the system. Furthermore, the paper describes not only the statistical data but also the issues pertaining to the food distribution system in a holistic sense, by analysing every aspect that possibly influences the performances and outcomes. There are not many comparative studies conducted on the performances and related issues of different States in the country to investigate the qualities and aspects of an effective performance.
There have been discussions about the areas of contention that obstruct the progress of these safety net programmes in the country. More often than not, the discussions relate to policies and administrative defects surrounding the issues at hand. The social and political structures play their parts in designing a specific society and their influences cannot be overlooked when it comes to policy and decision making. Albeit, the motives of the welfare measures are sound, the concept of targeting and price variation may lead to social tensions among different communities. People from lower castes in some States are denied their rights and women are usually dominated in a patriarchal society such as India. Also, politics in India has not been researched enough relating to these issues. Since it plays a positive influence in Tamil Nadu’s performance in food distribution, it could be pivotal to provide the impetus in dealing with this issue. Otherwise, the results from this paper coincides with the results from previous researches conducted on the topic in showing that the state of Tamil Nadu performs better in the food distribution system when compared to the country’s overall performance.

Since the Indian Constitution states adequate food to be a right of every individual, the Indian government should consider following Tamil Nadu’s activities on food distribution. The country should revert back to the universal system of PDS. Relevant operational and administrative measures can be initiated with officials taking the responsibility of being accountable in running the programmes. Decentralization of power among every level could further accountability among officials. Proper infrastructures with adequate facilities should be developed, which is the case in Tamil Nadu. Employing full time workers with standard remuneration will help workers to involve in the activities better. Cash credit facilities, like in Tamil Nadu, can be considered to monitor daily proceedings of FPSs. This may help with checking of malpractices among traders and officials. Better and active role for SHGs will be a game changer, as women will be directly involved in organizing and operation mechanisms. Mobile FPSs must be launched in all States to reach people with geographical disadvantages. Technology is a boon and should be incorporated into the structure for better operations and monitoring such as tracking system, GPRS billing machines, etc. Most of all, people must be made aware of the welfare schemes and entitlements and this must be the priority, as most people in rural areas are unaware of the benefits. Such measures, if properly implemented and operated would bring positive change in the performance of the food distribution system in the country.
6. CONCLUSION

It is clear, therefore, that the state of Tamil Nadu has fared better than the country as a whole in achieving food security by means of the food distribution system through welfare schemes, as a result of better policies and administration and social structures. Having analysed the performances and related issues of the food distribution system both for the country and the State of Tamil Nadu, this paper can conclude that there are grey areas that the country can rectify taking lessons from Tamil Nadu.

The study has shed limelight on statistical differences of the performance between the country and Tamil Nadu and most importantly, the issues that surround the food distribution system. The paper has analysed various factors such as poverty, economic and administrative policies enacted on food and agriculture, societal influences like gender bias and caste discrimination, management and operations of these programmes from the top to the grass root level and political influences pertaining to the food distribution system and determined the problems that mar effective implementation. This has then been compared to previous studies on these issues to perceive the actual situation of the programmes.

The country’s overall performance of food security measures has been mediocre and this clearly reflects on the status of poor people in the country. The study shows that the major cause of this performance is the implementation of the Targeted Public Distribution System. This made the administration and operation of public distribution difficult and provided loopholes for the corrupt, which in turn led to the omission of deserving people from the welfare scheme. As the Public Distribution System is the largest welfare scheme in the country, the consequences have been extremely bad. Significant parts of the population remain hungry. Inadequate infrastructure, lack of awareness, social stigmas and political indifference further obstruct the proper functioning of welfare schemes.

For Tamil Nadu, the analysis of various factors led to the conclusion that the universal Public Distribution System is the major cause for the State’s better performance. This is ably supported by efficient administration and operation mechanisms followed by the local government. Active involvement of Self Help Groups and the role of women in the social activities are unique and valuable contributions for the progress. Awareness among people regarding their entitlements is the strength of Tamil Nadu. Technology usage and innovative techniques prove to be beneficial factors for the improvement and advancement in implementing the schemes. Also, involvement of political parties in Tamil Nadu provides for an effective administration. Albeit Tamil Nadu faces problems like corruption, it is worth mentioning that a collective effort by government and people together makes the system function better than in the nation as a whole.

The country should revert back to the Universal Public Distribution System to make the scheme effective and meaningful. Performance factors of Tamil Nadu must be considered and included in the proceedings. Researches have to be performed to further strengthen the measures. These aspirations could turn into realities with commitment from all stakeholders of the society and help India toward achieving a hunger free country, in accordance with the Indian Constitution’s declaration of right to food. Considering, however, that we are already entering the year 2014, as the final touch is being put to this paper, it remains highly improbable that the UN’s Millennium Development Goal of reducing hunger by half by 2015 will be met.
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