

**EFFICACY OF DIGITAL REFORMS OF PUBLIC DISTRIBUTION SYSTEM IN INDIA
AN EMPIRICAL ANALYSIS OF AGRA DISTRICT**

Synopsis

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1. INTRODUCTION

1.1 Public Distribution System (PDS) in India

The Public Distribution System (PDS) is an Indian food Security System for the poor people established by the Government of India under the Ministry of Consumer Affairs, Food, and Public Distribution. While the Central government is responsible for procurement, storage, transportation, and bulk allocation of food grains, the State government hold the responsibility for distributing the same to the consumers through the established network of Fair Price Shops. Major commodities distributed include wheat, rice, sugar, and kerosene.

1.2 Evolution of the Public Distribution System in India

India's Public Distribution System (PDS) is the largest distribution network of its kind in the world. It was introduced around World War II as a war-time rationing measure. Prior to the 1960s, distribution through this System was generally dependant on imports of food grains. The system was then expanded in response to the food shortages of the time. Following this, the government set up the Agriculture Prices Commission (later renamed to Commission for Agricultural Costs & Prices (CACP)) and the Food Corporation of India to improve domestic procurement and storage of food grains .

By the 1970's, it had evolved into a universal scheme for the distribution of subsidised food. In the 1990's, the scheme was reconstruct to improve access of food grains to people in hilly and inaccessible areas, and to target the poor.

In 1992, a Revamped Public Distribution System (RPDS) was launched in 1775 blocks throughout the country. This was done to strengthen & streamline the Public Distribution System and to improve its reach to poor families especially in the far-flung, hilly, remote and inaccessible areas. It covered areas where special programmes like Drought Prone Area Program (DPAP), Integrated tribal development program (ITDP), Desert Development Program (DDP) were under operation and in certain Designated Hill Areas (DHA).

In 1997, Targeted Public Distribution System (TPDS) was launched with special focus on the poor families. It aimed to provide subsidized food and fuel to 6 crore poor families for whom 7.2 Megatonne(MT) foodgrains was earmarked annually, through a network of ration shops. Food grains

such as rice and wheat that are provided under Targeted Public Distribution System are procured from farmers, allocated to states and delivered to the ration shop where the beneficiary buys his entitlement. The centre and states share the responsibilities of identifying the poor, procuring grains and delivering food grains to beneficiaries.

Over and above the Targeted Public Distribution System allocation, ‘additional allocation’ was also given periodically to the states. This transitory allocation was to benefit Above Poverty Line (APL) population. But, this allocation was issued at higher prices than the ones at Below Poverty Line (BPL) quota.

In December 2000, the government launched Antyodaya Anna Yojana (AAY) to benefit the poorest of the poor people. 25kg per month per household (increased to 35kg in 2002) was provided at the highly subsidised rate of Rs 2 per kg of wheat and Rs 3 per kg of rice. The scheme aimed to reach one crore Antyodaya households. The, AAY has undergone three phases of expansion and covered 2.5 crore poorest of the poor people. In between 2003-2006, 3 expansions took place which included 1.5 crore people (38% of Below Poverty Line(BPL)) belonging to terminally ill, widows, senior citizens with no societal support, landless and marginal farmers, primitive tribal groups, etc have been added to Antyodaya Anna Yojana (AAY)

In 2013, National Food Security Act (NFSA) was enacted. It introduced individual entitlement of 5 kg per person per month foodgrains to around 82 crore of population.

Source: pds buffer stocks and food security.pdf

Table no. 1: Timeline of Public Distribution System; 1940’s to present

Evolution of Public Distribution System	Timeline	Details
Public Distribution System(PDS)		Launched as general entitlement scheme
Targeted Public Distribution System (TPDS)	1997	Public Distribution System was revamped to target poor households
Antyodaya Anna Yojana (AAY)	2000	Scheme launched to target the ‘poorest of the poor’
PDS Control Order	2001	Government notified this order administer Targeted Public Distribution System
People's Union of Civil Liberties (PUCL) vs Union of India	2001	Case in Supreme Court contending that “right to food” is a fundamental right
National Food Security Act(NFSA)	2013	Act to provide legal right to food to the poor

1.3 OBJECTIVES OF PUBLIC DISTRIBUTION SYSTEM

The Public distribution System primarily evolved as a system of management of scarcity through distribution of food grains at affordable prices. However, it seeks to achieve other objectives like:

- To provide essential consumer goods at cheap and subsidized prices to the consumers
- To insulate them from the impact of rising prices of these commodities
- To maintain the minimum nutritional status
- To put an indirect check on the open market prices of various items

However, it must be kept in mind that the Public distribution system is merely supplemental in nature. It is not intended to make the entire requirement of any of the commodities distributed under it available to a household or section of the society. It acts as a safety net and attempts socialization in matter of distribution of essential commodities

Public Distribution System supply chain can be broken into three segments:

1. Procurement of food grains
2. Storage & transportation
3. Distribution of food grains

To put simply, Public Distribution System (PDS) begins when the government buys food grains through the Food Corporation of India (FCI) from farmers in the procurement stage and terminates when the beneficiaries receive the intended quality and quantity of food grains from the Fair Price Shops. It seeks to provide to the beneficiaries cereals and essential commodities like rice, wheat, sugar and kerosene oil. However, state government manage the system at the ground level and are exhorted to add other essential commodities like pulses, salt, candles, matchboxes, ordinary clothes, school text books/copies etc. A number of state governments have set up Civil Supplies or Essential Commodities Corporations to buy such additional items directly from the manufacturers and uses the structure of Public Distribution System to arrange for the sale at lower than market rates.

1.4 FUNCTIONING OF PUBLIC DISTRIBUTION SYSTEM

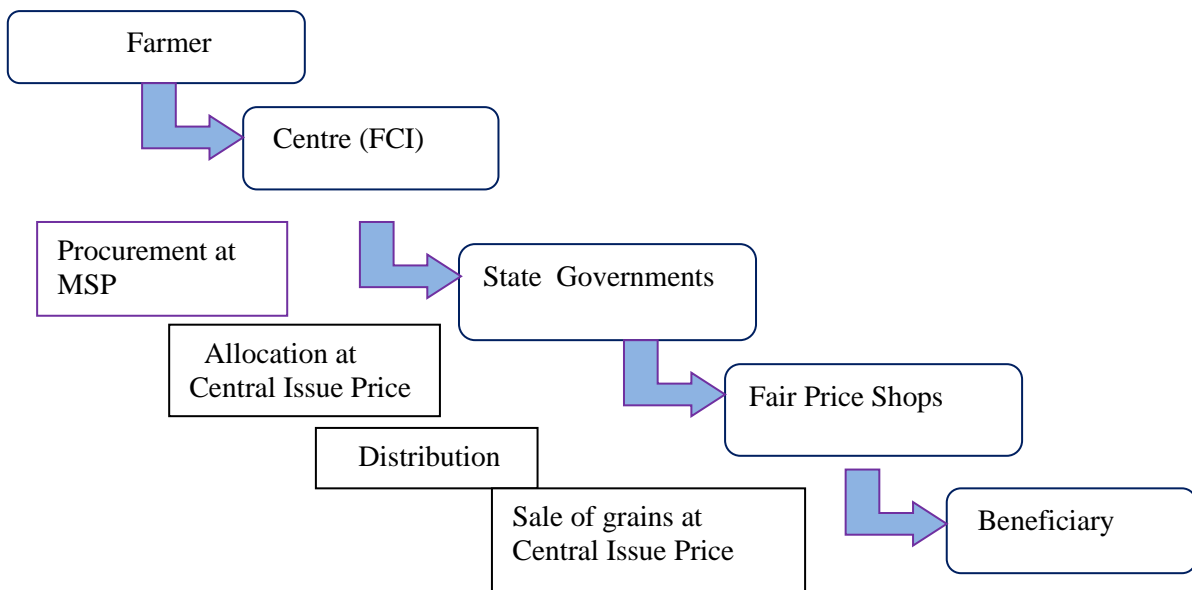


Figure 1: Functioning of Public Distribution System

The central and state government share responsibilities in order to provide food grains to the identified beneficiaries. The centre procures food grains from farmers at a minimum support price (MSP) and sells it to states at central issue prices. It is responsible for transporting the grains to godowns in each state. States bear the responsibility of transporting food grains from these godowns to each fair price shop (ration shop), where the beneficiary buys the food grains at the lower central issue price. Many states further subsidise the price of food grains before selling it to beneficiaries.

The Food Corporation of India (FCI) is the nodal agency at the centre that is responsible for transporting food grains to the state godowns. Specifically, FCI is responsible for:

- ✓ Procuring grains at the Minimum Support Price(MSP) from farmers
- ✓ Maintaining operational and buffer stocks of grains to ensure food security
- ✓ Allocating grains to states
- ✓ Distributing and Transporting grains to the state
- ✓ Selling the grains to states at the central issue price to be eventually passed on to the beneficiaries

1.5 ISSUES IN IMPLEMENTATION:

It has been observed that even though the Indian economy has achieved remarkable economic growth along with a decline in poverty over the last two decades, improvement in nutritional status have not kept pace with this economic growth. Greater access to subsidised grains for the poor was expected to

reduce malnutrition, leading to a reduction in the number of underweight children. Following are the issues with the existing Public Distribution System:

1.5.1 Identification of beneficiaries:

- Large errors occur in exclusion and inclusion of Below Poverty Line (BPL) and Above Poverty Line (APL) families in beneficiary data. The problem of targeting is compounded by the lack of good quality regular data; no regular official estimates of the actual income of households
- The entitled beneficiaries are not getting food grains while those who are ineligible are getting undue benefits
- Another indicator of inaccurate classification of beneficiaries is the existence of ghost cards in several states. 'Ghost cards' are cards made in the name of non-existent people. The existence of ghost cards indicates that grains are diverted from deserving households into the open market
- Shortfall in storage capacity with Food Corporation of India against the central pool stock
- After obligation under Targeted Public Distribution System have been met, the food grains that have been procured need to be stored as a buffer stock. While there has been a sharp hike in procurement from, FCI's storage capacity (both owned and hired) has not increased commensurate to the growth in procurement

1.5.2 Rising Subsidy and financial burden:

- There are other large financial burden, the food subsidy because the cost of procuring and delivering food grains is about six times its sale price. It is anticipated that the food subsidy will rise steadily due to the increased issues with regard to trends in procurement vis-à-vis production of foodgrains. Central government procures about a third of the quantity of cereals produced domestically. However, the amount for procurement is expected to increase under the NFS Act, raising concerns regarding the sustainability of such a food delivery mechanism.
- There are also concerns regarding the financial feasibility of such system. The centre bears a procurement of grains under the Act, related costs and other factors.

1.5.3 Inconsistent quality:

Quality of ration is inconsistent— sometimes it is fine, sometimes it is awful. Mainly bad quality of

wheat and rice.

1.5.4 Corruption and leakages:

- High levels of corruption and leakage continue to plague the PDS. Part of this leakage occurs at the level of the fair price shops, where some store owners exchange the high-quality goods provided from the government for distribution through the PDS with lesser quality goods from the general stores.
- Dual pricing introduced through the TPDS is an incentive for stakeholders to divert commodities into the open market where they can command a higher price.
- Lack of transparency in the selection of procedure of PDS dealers

1.6 REFORMS IN THE PUBLIC DISTRIBUTION SYSTEM :

- **Aadhaar Seeding in PDS:** To weed out duplicate/in-eligible/bogus ration cards and to enable rightful targeting 83.41% i.e. about 19.41 crore ration cards (as on 29th May, 2018) have been Aadhaar seeded.
- **Automation of Fair Price Shops:** In 2014 Department of Food & Public Distribution prescribed the guidelines and specifications for use of PoS(Point of sales) at FPS(Fair Price shops). 3,16,600 FPSs (as on 29th May, 2018) out of 5,27,930 have PoS(point of sales)
- **Digital/Cashless/Less-cash Payments in PDS:** To promote the use of less-cash/digital payment mechanisms, the Department has issued detailed guidelines for use of AePS,(Aadhaar enabled payment system) UPI(Unified payment interface), USSD(Unstructured Supplementary Service Data), Debit/Rupay Cards and e-Wallets in 2016. About 10 States/UTs a total of 51,479 FPSs are enabled for digital payments.
- **Digitization of Ration Card:** 100% digitization of Ration Card data has been done. All States have transparency portal, 30 States have online allocation of food grains and 21 States/UTs have computerised supply chain management system.
- **‘Integrated Management of PDS’ (IM-PDS):** The scheme has been approved with an outlay of Rs. 127.3 crore to be implemented during FY 2018-19 and FY 2019-20 for establishing Public Distribution System Network (PDSN) to establish central data repository and central monitoring

system of PDS operations and to also enable implementation of national level portability.

- **Construction of Godowns and Silos:** A total storage capacity of 22.23 lakh MT(Megatonne) has been added during last four years under the PEG (Private Entrepreneurs Guarantee) Scheme. A road map for creation of 100 Lakh MT(Megatonne) storage capacity in the form of Steel Silos by FCI and other agencies including State Governments on PPP(Public Private Partnership) mode for wheat and rice has been approved. Construction has been planned in a phased manner. 6.25 Lakh MT Steel Silos have been completed and contracts for 23.5 Lakh MT capacity have been awarded.

- **Simplified Registration Rules, 2017:** To simplify the process of registration of warehouses and for their better and effective regulation and supervision, new rules namely, the Warehousing (Development and Regulation) Registration of Warehouses Rules, 2017 have been notified.

- **INGRAM(Integrated Grievance Redressal Mechanism Portal) :** It was launched under National Consumer Helpline in 2016 for providing a common IT platform for various stake holders involved in the Consumer Grievance Redressal Mechanism and for disseminating information to consumers.

- **One Nation One Ration Card (ONORC)**

- The ONORC scheme was launched in August, 2019 is aimed at enabling migrant workers and their family members to buy subsidised ration from any fair price shop anywhere in the country under the National Food Security Act, 2013. ONORC is the far-reaching reform of the public distribution system since the Food Security Act. It will provide food security to jobless migrants .

(Source: **Department of Food and Public Distribution**

Ministry of Consumer Affairs , Food and Public Distribution Government of India)

1.7 TYPES OF RATION CARDS IN INDIA :

Ration card

A **Ration card** is the official document issued by the respective state government , The card enables eligible **households** *to buy food grains at subsidized rates under the National Food Security Act (NFSA).

The document serves as a common form of identification for many individuals. These cards are

issued after the state governments identify eligible households for purchasing food grains at subsidized rates from the Public Distribution System

***HOUSEHOLD**

A household is a living place that has a single person or more living together, sharing foods and amenities as a single unit

***Prior implementing National Food Security Act (NFSA), there were mainly three types of ration cards issued by State Government Distinguished by different colours opted by concerned State Government which are as:

- APL (Above Poverty Line)
- BPL (Below Poverty Line)
- Antyodaya (AAY) ration card

***According to NFSA 2013, APL group and BPL group have been re-classified into two categories - Non-Priority and Priority.

Thus NFSA prioritizes household's needs considering not only their income but other socioeconomic imbalances in the society

1.8 RATION CARD CATEGORY TYPES AS PER NFSA

The new NFSA system categorizes households mainly into two:

- A.Priority Household (PHH) and
- B.Non-priority Household (NPHH).

The households fulfilling the eligibility criteria will be considered as priority households for inclusion in the NFSA and their ration card is known as Priority Household Ration Card.

Those who are ineligible be listed in the Non-priority house holds and their ration cards are known as Non-priority Household Ration card.

A.PRIORITY CATEGORIES

Priority category has been divided into 4 sub-categories:

1. General Priority
2. AAY (Antyodaya Anna Yojana) ration card
3. AY (Annapurna Yojna) ration card

4. State Priority Ration Card

(Social Security (SS) that comes under State priority)

These priority categories and their features are explained below:

1. PRIORITY HOUSE HOLD (PHH) RATION CARD

A major section of ration card in the priority sector comes under this category. To alleviate poverty, NFSA claims right to receive food-grains at subsidized prices by persons belonging to eligible households, that is Priority House Holds (PHH) under Targeted Public Distribution System (TPDS).

BENEFITS OF PRIORITY HOUSEHOLD (PHH) RATION CARDS

Every person belonging to priority households, shall be entitled to receive five (5) kg of food-grains per person per month at subsidized prices from the ration shops not exceeding Rupees 3 (Three) per kg of rice, Rupees 2 (Two) per kg of wheat and Rupee 1 (One) per kg for coarse grains for a period fixed by the Central Government and thereafter, at such price as may be fixed by the Central Government from time to time.

ELIGIBILITY CRITERIA FOR PRIORITY HOUSEHOLD (PHH) RATION CARD

Eligibility calculated through inclusion guidelines and exclusion guidelines. A household passes any one of the criteria will be considered for inclusion. This included household again scrutinize with exclusion criteria. If any exclusion criteria applicable to this household will be ineligible to priority list. Both the lists - Inclusion and Exclusion criteria listed below:

NFSA INCLUSION CRITERIA FOR PRIORITY HOUSEHOLD RATION CARD (PHH RATION CARD)

- Household without shelter.
- Household with destitute who is living on alms.
- All households of Primitive Tribal Groups.
- Household having a widow pension holder, if not otherwise ineligible as per the nine exclusion criteria.
- A person with disabilities of 40% or more.
- Any transgender person.

National Food Security Act (NFSA) EXCLUSION CRITERIA FOR PRIORITY HOUSEHOLD RATION CARD (PHH RATION CARD)

- Any family covered under any of the nine exclusion criteria are not eligible for being a beneficiary under NFSA 2013.
- Household owning motorized a four wheeler / a heavy vehicle / a trawler / motor boats (two or more).
- Household owning mechanized agricultural equipment such as Tractors or Harvesters.
- Household with any member who is a regular employee - gazetted or non-gazetted - of Central Government, State Government, Public Sector Undertakings, Government aided autonomous bodies and local bodies. This will exclude incentive and other honorarium based workers.
- Household with any member in the family earning more than Rs.10,000/- per month in the rural and Rs.15,000/- per month for urban areas.
- Pensioners with monthly income of more than Rs.10,000/- per month in rural areas and Rs.15,000/- per month in urban areas.
- Household with enterprises (other than micro-enterprises) registered with the Government for manufacturing and services.
- Household paying Income Tax or Professional Tax.
- Household having domestic electric connection with a load of 2 KW or more and consuming an average of 300 units of energy (KWH) per month.

Household with three or more rooms with pucca walls and pucca roof.

2. ANTYODAYA ANNA YOJANA (AAY) RATION CARD

It is for the poor that Antyodya Anna Yojana (AAY) has been conserved. It is estimated that 5% of people unable to get two square meals a day on a sustained basis through out the year. Their purchase is so low that they are not in a position to buy food grains round the year even at BPL rates, 5 crores of people or 1 crore families which constitutes the target group of Antyodya Anna Yojana. The AAY scheme was introduced by India on 25th December, 2000. This scheme reflects the commitment of the Government of India to ensure security for all create a hunger free India in the

next five years and to reform and improve the distribution system so as to serve the poorest of the poor in rural and urban areas.

ANTYODAYA FAMILIES:-

These are very poor people who doesn't have a stable income at all. Single men along with women and aged people above the age of 65 can attain this facility in an impeccable manner. Rickshaw pullers, Coolies, Daily Labourers will qualify this category and will be liable to get Food grains at cheap cost. A privileged type ration card is being issued to AAY families. The focus on the following groups has been emphasized in the scheme guidelines:

- Landless agriculture labourers
- Marginal farmers
- Rural artisans/craftsmen such as potters, tanners, weavers, blacksmiths, carpenters, slum dwellers, and persons earning their livelihood on daily basis in the informal sector like porters, coolies, rickshaw pullers, hand cart pullers, fruit and flower sellers, snake charmers, rag pickers, cobblers, destitute and other similar categories in both rural and urban areas.
- Households headed by widows or terminally ill persons / disabled persons / persons aged 60 years or more with no assured means of subsistence or societal support.
- Widows or terminally ill persons or disabled persons or persons aged 60 years or more or single women or single men with no family or societal support or assured means of subsistence.
- All primitive tribal households.

BENEFITS OF ANTYODAYA ANNA YOJANA (AAY) CATEGORIES

Antyodaya Anna Yojana (AAY) household's entitlements at 35 kg of food grain per household per month to continue as before. Wheat and rice are being issued at the scale of 15 kg and 20 kg per family per month at the rate of Rs. 2 and Rs. 3 per kg respectively.

3. ANNAPURNA YOJNA (AY) RATION CARD

Annapurna Yojna (AY) Ration Card is a special type of ration card issued only to the elderly poor people above 65 years. They are entitled for 10kgs of food grain on the monthly basis from the government side.

4. STATE PRIORITY RATION CARDS (SPHH)

State priority cards are issued only to a member who needs treatment due to serious illness but comes under non-priority house hold ration card. State priority card holder is not eligible for any other rationing articles from ration shops. Issuance of this type ration card is the responsibility of concerned state and purely depends ruling State Govt. and its policy.

B. NON-PRIORITY CATEGORIES (NPHH)

The house holds remaining after selecting priority list will be moved to Non-Priority category. Non Priority House Holds (NPHH) are ineligible to get subsidised food grains under NFSA system.).

***** This study is only focused on PHH(Priority Household) and AAY (Antyodaya Anna Yojana)**

2.REVIEW OF LITERATURE

Researcher has reviewed more than 40 research publications from which selected 31 as shown here :-

2.1 Based on Public distribution system in India

2.1.1 Justice Wadhwa Committee on public distribution system(PDS) on the state of Kerala A critical issue which has arisen in the course of the various visits by the Committee to different States pertains to proper identification of BPL beneficiaries. One of the critical factors which has resulted in the PDS not functioning properly is what can be termed as ‘exclusion and inclusion errors’. This issue is extremely pivotal in as much as till a rational criteria for the identification is put in place for the identification of true beneficiaries and an independent survey is conducted to ensure that the poorest of the poor are infact covered under the BPL/AAY categories as the case may be, all other measures being suggested by this Committee may be defeated as a faulty beneficiary list would continue to erode the effectiveness of the system.

2.1.2 Shruthi Cyriac, Vishishta Sam & Naomi Jacob 2008 ,The PDS System in Kerala: A Review The paper is an attempt to study the PDS system in Kerala-often referred to as the ‘Kerala Model’ of implementation of the food security programme which subsidizes consumers and procures grain from farmers at prices higher than market prices . After attaining self sufficiency in food production, the main challenge of the PDS was translating this macro level food security to a micro

level, so that households in states which couldn't produce enough food to feed its population and depended on imports could avail of the surplus in states which produced more than what was necessary to feed their population. In 1997 there was a shift from the Universal PDS system to the Targeted PDS system with regards to cereals sold under the PDS.

2.1.3 Brij Pal , (2011)Organization and Working of Public Distribution System in India: A Critical Analysis To sum up, technical and policy reforms should be sure. Banking and Information Technologies should permit government to bring transparency and pace in all applications without extra expenses. In addition, computerization can help in modernizing the PDS. A number of states are already innovating in PDS execution, and improved performance can be seen in some cases. Although the introduction of modern tools such as smart cards may not be a panacea for all the evils, it can solve many of the problems particularly that of pilferage and spurious beneficiaries. They are like low hanging fruits which can be picked up easily

2.1.4 Sakshi Balani (December 2013)Functioning of the Public Distribution System An Analytical Report During September 2013, Parliament passed the National Food Security Act (NFSA), 2013. The NFSA seeks to make the right to food a legal entitlement by providing subsidised food grains to nearly two-thirds of the population. The Act relies on the existing Targeted Public Distribution System (TPDS) mechanism to deliver these entitlements. This paper describes the functioning of the existing TPDS mechanism and the role played by the centre and states. It also explores challenges in the effective implementation of TPDS and alternatives to reform the existing machinery.

2.1.5 Dr. S. Nakkiran , (December-2004) A Study on the Effectiveness of Public Distribution System In Rural Tamilnadu It was found in this study that problems like leakages, poor quality, under weight, non-availability of controlled as well as non-controlled articles during certain times, non-availability of ration cards, bogus cards, etc., affect the efficiency of the system. Ensuring the availability of essential articles as per allotment as and when required by the cardholders, increased margin to cooperatives, and better salary to employees, reduction in the number of cards to be handled by a FPS, maintaining and updating the Notice Boards at every FPS, formation of vigilance committees at every FPS level and providing more role to women SHGs are

the viable options put by the sample respondents to strengthen the PDS, which cannot be ignored.

2.1.6 Dr. Harvinder Singh, Abhishek Sharma(02 November 2020) Analysis of public distribution system : A food security programme in india Public distribution system is a flagship food security programme of the government. Under PDS government transfer food grains to the general public or households at subsidise rate. Government procures food grains from farmers at minimum support price and it stores it in Food Security, Corporation of India godowns and through the ration shops or fair price shops it transfers food grains to general households. But public distribution system suffers from many inefficiencies. The purpose of this paper was to discuss scenario of public distribution system in India. This is a review-based paper that has used existing literature and other secondary sources to study scenario of public distribution system in India.

2.1.7 Ms. Ramandeep Kour (2014)Effectiveness of Public DistributionSystem in Jammu & Kashmir Public Distribution System (PDS) is a poverty alleviation programme and contributes towards the social welfare of the people. The study by focusing on the effectiveness of the PDS is of immense significance to the policy makers, Government and the Planning department by recognizing the rights of citizens and their entitlements for food grains, would suggest methods of ensuring food security especially among poor sections of the society. It identifies grey areas which would help CAPD officials to streamline the working of FPS so that distributional goals for welfare improvement are implemented and achieved. The PDS department implements the scheme of minimum support price to the producers of wheat, paddy and coarse grains and the distribution of food grains from the central pool. A close watch is kept on the stock and price levels of food grains and efforts are made to ensure their adequate availability at reasonable prices in different parts of the country.

2.2 Based on food security through revamped public distribution system

2.2.1 Dr. Reeta Chouhan , Apoorv Shrivastav(2019) Ensuring food security through revamped public distribution system The research paper analyses the role of PDS acting as a tool to ensure the nutritional needs of India. It briefly analyses the different stages of PDS and its gradual development in the country. Paper presents two major aspects to ensure food security. The first one is production and availability of enough food grains and other is accessibility and affordability of

food grains by all, particularly by economically weaker section of the society. It has been found that India has prudently dealt with earlier aspect as Food Corporation Of India's (FCI) godowns hold more than the mandated buffer stock of food grains. The aspect of accessibility and affordability needs to be focused. Global rankings which measure nutritional deficiencies and hunger show that India needs to put more effort. India not only needs to strengthen its PDS but also needs to ensure that age group specific nutrition is given to the population to tackle problems of malnutrition, stunting and wasting.

2.2.2 Sujoy Chakravarty, Sejal Anand (2006)Food Insecurity in Gujarat :A Study of Two Rural Populations Using data that surveys sample households in the tribal area of rural Gujarat known as the Panchmahaals-Dahod and a non-tribal sample from Maliya and Jasdhan in the Rajkot district of Saurashtra, we find the prevalence of large-scale food insecurity with less than 10 percent of the population surveyed found to be food secure all 12 months in a year. A staggering 73.66 per cent (Panchmahaals) are found to be food insecure for more than six months in a year. The corresponding figure for Rajkot sample stands at approximately 19 per cent. This food insecurity is seen to be roughly consistent across poverty classification categories with similar distributions of food deprivation across both above poverty line and below poverty line households in our sample. Finally, the unavailability of food is found to be a seasonal phenomenon with unavailability peaking over the summer and monsoon and dropping off right before the winter months.

2.2.3 Gowd Kiran Kumar (2017) Food Security and Global South: A Comparative Policy Analysis The first Millennium Development Goal (MDG) aimed at reducing poverty and hunger by half between 1990 and 2015. The goal combined issues of extreme poverty and hunger as they are a common cause and expected an effect. The goal might appear simple but involve complex and interwoven policies. It is quoted widely that more than one billion poor crossed the extreme poverty and the global south played a major role in reducing the hunger. However, about 800 million are reported to be poor in extreme poverty and hunger. The developing countries (or 'global south') evolved country-specific food security models, and are expecting a breakthrough in this domain by focusing on zero hunger. This article attempts to conceptualise different policy perspectives of 'global south' by using the comparative method and a critical analysis of different food security

models is presented as a conclusion.

2.2.4 D. P. K. Pillay & T. K. Manoj Kumar (2019) Food Security in India: Evolution, Efforts

and Problems This article examines India's efforts to achieve food security. It traces the problem, from the inadequate production of food grains during colonial times, to the challenges of procurement, storage and distribution of cereals in post-independence India, after achieving self-sufficiency in food production. The establishment of the Public Distribution System (PDS) and its evolution into the Targeted PDS and the National Food Security Act are outlined. The role of the Food Corporation of India and the efforts to improve it, are discussed. A critical analysis of India's food security system is made in light of day to day problems.

2.2.5 Professor M. P. Bezbaruah (2013)Food Security: Issues and Policy Options A Discussion

in Light of India's National Food Security ActThis article presents a brief summary of the debate in the backdrop of a discussion of the general issues related to food security and India's past record of food grain management. Since the Bill has now been turned into an Act, it is suggested that the focus of attention should now shift to its implementation mechanism and suitable measures to mitigate the apprehended undesirable consequences of the proposed nationwide food security programme.

2.2.6 Anil Chandy Ittyerah (2013)Food security in india : issues and suggestions for

effectiveness This paper highlights the widely accepted definition of food security.The first section that lays out the broad contours of food security in India by providing an overview that sets the overall framework for our discussion follows this. Food Security is determined by the availability of food, the access to food and the absorption (or nutrition) of food in the system. These three conditionalities for food security are closely inter-related and thus availability and access to food can increase absorption or nutritional levels among the house

2.3 Based on Digital reforms in Public Distribution System

2.3.1_Meena Kumari , Mapping the Accessibility of Right to Food through Aadhaar

This article focuses on exploring the major shifts in the food policy framework of India. Though the food policy in India experienced various changes in pre-reform period i.e before 1991and during the reform period i,e after 1991 onwards. But the momentous transformation in the food policy of India came

after the Supreme Court verdict of 2001 which formulated the policy of Right to food as a legal entitlement and directed the states to explore the mechanisms to make it more accessible to the people. Acknowledging this, the government of India explored the mechanism of Aadhaar, a technological initiative to provide effective, transparent and convenient access of Right to food to the intended beneficiaries.

2.3.2 Silvia Masiero (2016) Digital governance and the reconstruction of the Indian anti-

poverty system On a global scale, programmes of social protection for the poor are becoming increasingly computerised, and architectures of biometric recognition are being widely used in this respect. India's Public Distribution System (PDS) in Kerala, which is augmenting its main food security scheme with the computerised recognition of its users. In the government's narrative, biometric technology is depicted as an optimal solution to the illicit diversion of PDS goods on the market. Nevertheless, according to the multiple narratives collected across the state, beneficiaries dispute this view in different ways because of the mixed effects of the new technology on their entitlements under the PDS. The government's capability to reconstruct its image through digital innovation is thus found to be constrained by citizens' perceptions derived from their encounters with the new technology of governance

2.3.3 Kiran Kumar Gowd (2020), Network governance, food security, and public service delivery: Functioning of Chhattisgarh's Centralized Online Real-time Electronic Public

Distribution System (CORE-PDS) Many studies found that Chhattisgarh, a state in the Hindi belt of the country, is implementing the scheme effectively through centralized online real-time electronic PDS (CORE-PDS). This article uses network governance as a theoretical framework to understand the success story of Chhattisgarh's CORE-PDS and to identify its key success factors by analyzing the role of state and non state actors in the implementation of the PDS. The network governance approach is emerging as a crucial theoretical framework in the governance and public policy fields for identifying the challenges and problems in the policy domain and building networks among state actors, markets, civil society, and citizens.

2.3.4 Gowd Kiran Kumar (2017) implementing Food Security and e-Governance Initiatives: A Comparative Study of Chhattisgarh and Telangana

Food Security is crucial in achieving the

Zero Hunger, one of the crucial of Sustainable Development goals (SDG). In the post-independent India, Public Distribution System (PDS) is an important policy intervention for providing the food security to the hunger and poor. There are certain challenges in the implementation of the PDS like corruption, leakages, ghost cards, market diversion of ration and other supply chain management issues. The paper attempts to understand the role of Information and Communication Technology (ICT) tools in reducing the corruption and 'leakages' in food security policy of India, concerning PDS programme for reducing the hunger. In the federal system of India, states play a crucial role in the implementation of the PDS programme and the states are advised to leverage the ICT tools in the National Food Security Act (NFSA). There are differences in the food policy implementation of various states by improving their information technology governance structure.

2.3.5 Saini, Shweta; Sharma, Sameedh; Gulati, Ashok; Hussain, Siraj; von Braun, Joachim (2017) Indian food and welfare schemes: Scope for digitization towards cash transfers The paper is divided into 4 sections. Section I briefly discusses the history and evolution of PDS. In Section II, the concept of cash transfers, its history and national and international experiences are presented and analysed. The DBT-food experience of the two UTs- Chandigarh and Puducherry- is also analysed in this Section. The evaluation of the states for their readiness for DBT-food is done in Section III and the policy recommendations emanating from all the Sections are presented in Section IV.

2.3.6 Sugandh Arora ,Tawheed Nabi, Vedica Awasthi(June 2021)Challenges of digital transformation and Indian public distribution system: A systematic review The study presented a systematic approach to finding the main ICT reforms and their impacts and challenges on the PDS. Thus, the study highlighted the main issues faced by the E-PDS viz; identification of the beneficiaries under the scheme, adulteration in the quality, and malpractices during the procurement and distribution of commodities. These issues are the major hindrance to the successful implementation of the PDS. But the use of technology and the internet in the delivery mechanism can reduce leakage and tampering when used tactically. ICT system confirms the credentials of beneficiaries with the help of biometric and touch screen facility access, an online payment system, e-challans, an automatic vending machine for the clearance of commodities to

overcome the many obstacles and hindrances

2.3.7 Shweta Chopra, Prashant Rajan , Modeling Intermediary Satisfaction with Mandatory

Adoption of E-government Technologies for Food Distribution The objective of this study was to situate existing models theorizing technology acceptance in the context of public food distribution in Chhattisgarh, India by integrating existing and new variables into a technology acceptance model predicting both direct and indirect effects on stakeholder satisfaction with technology. Results of the PLS analysis provide strong empirical support for the reliability and validity

2.3.8 Vanguru, Naga Satyanarayana and Dr. Rajasekhara Babu, M.(2019) Impact of ict

reforms on public distribution system in Andhra Pradesh – A review End-to-end automation

of processes, along with digitization of beneficiary data, has made PDS in AP robust and accountable. Real-time information generation provides a clear digital trail for each transaction. This system was quite expensive and the set up cost of one FPS was approximately 55,000 (USD 808). This totals to 1,556 million (USD 23 mn) for 28,295 FPSs. However, the resultant savings, which in Micro Saves estimate are around 2,250 million (USD 34 mn) per annum, have made it a worthwhile investment. The best practices adopted by AP make it a case worthy of emulation by other states. Prioritizing both transparency and efficiency, these initiatives ensure that the poor households have access to their entitlements, are not inconvenienced, and save the government huge amounts by controlling the diversion of stocks and plugging leakages in the delivery channel.

2.3.9 Jean Drèze, Nazar Khalid, Reetika Khera, Anmol Somanchi (december 16, 2017)

,Aadhaar and Food Security in Jharkhand Pain without Gain The imposition of Aadhaar-based

Biometric Authentication (ABBA) on the PDS in Jharkhand seems to be a case of “pain without gain.” On the one hand, the system has led to serious exclusion problems (particularly for vulnerable groups such as widows, the elderly and manual workers) as well as higher transaction costs. On the other, it has failed to reduce quantity fraud, which is the main form of PDS corruption in Jharkhand. Nor has it helped to address other critical shortcomings of the PDS in Jharkhand, such as the problem of missing names in ration cards, the identification of Antyodaya households, or the arbitrary power of private dealers.

2.3.10 Aakanksha Gupte and Gayatri Doctor (December 2021)Aadhar enabled public distribution system (AEPDS), beneficiary survey and assessment framework digitization and monitoring are the two parameters that needs improvement in order to overcome the challenges faced in the smooth functioning of AePDS. The district should look forward to direct benefit transfer as mode of payment and if possible, use biometrics for attendance of the FPS dealers and officials which could help ensure regularity in functioning

2.3.11 Athira, Meharbania, Renjith Kumar ,Sanuja Santhosh Shalu Raj. T.S Vidhya. K.C (2019) Impact and Issues of Aadhaar Enabled Public Distribution System (AePDS) in Kerala: Study from Trivandrum To overcome the issue, utilization of technology with linkage of UID (Unique Identity Number) with the PDS, use of Biometric enabled smart cards for the beneficiary identification. Using this proposed biometric enabled finger print management system can have managed better ways of ration card system to stop the pilferage of the commodities also a computerized ration system to achieve paperless work and to increase security and using this system, can achieve transparency and reduce fails of commodities in the black market. Cardholder did not get the correct card category, according to their status. Inefficiency in providing full quota by the shop owner. It ensure food security as whole

2.3.12 G. Dilip Diwakar,Dr.Renjith R. Pillai 2019 Implementation of DBT to ensure Food Security: A Case Study of PDS in Puducherry, IndiaThis study examines the functioning of cash transfer programme and enquires if it has succeeded in ensuring food security in rural Puducherry. Even though the direct cash transfer addresses the corruption, leakage and delay but the people are not showing interest in DBT. Especially this is true in the cases where the PDS works well. Therefore, in Puducherry, 84 per cent of the respondents have reported that receiving rations from the PDS shops will ensure greater and assured food security. Even among the beneficiaries the daily wage labours and beneficiaries from Scheduled Caste very strongly supported the provision of ration from PDS, they said it will ensure food security and the result was statistically significant. Looking into the view of the findings it is clear that cash transfer programme will not be the solution for all government programmes. Especially in the case of food security programmes like PDS, Midday Meals (MDM), Integrated Child Development Service (ICDS) etc they should consider the provision

of benefit in kind and not as cash.

2.4 Based on Factors Affecting Beneficiaries' Preference

2.4.1 Abhay Grover (2017) Factors Affecting Beneficiaries' Preference for Biannual Distribution of Food Grains in Public Distribution System of Punjab, India In 2014, to improve upon the existing scheme, the Punjab government launched a “new wheat-pulses scheme” under the public distribution system. The state decided to distribute grains on a six-monthly basis instead of every month. It claimed various benefits, whereas beneficiaries expressed concerns. The purpose of this research was to identify and understand factors affecting beneficiaries' preference for successful adoption of six-monthly distribution system. Factors affecting beneficiaries' preference included monthly hassle, leakages in system, storage challenges, interval of grain distribution, one-time down payment, trade of bulk grains by family, exploitation by middle-men, communication of arrival of grains, gender, area, and nature of employment.

2.5 Based on Impact of public distribution system

2.5.1 Gurdeep kaur ghumaan & pawan kumar dhiman (2014) Impact of public distribution system on bpl families an analysis of punjab All over the world hunger eradication and poverty alleviation are twin objectives of Public Distribution System(PDS) in the developing countries like India. It is intended to serve as a safety net for the poor by providing essential goods and services, mainly the food items i.e rice, wheat, sugar, kerosene to all sections of population especially the poorest of the poor at reasonable cost. Effectiveness of the Public Distribution System (PDS) depends on a large number of policy decisions regarding operational & organisational aspects of the PDS. To identify the real impact and implications of any policy, functioning of any policy at the micro level is analysed. The present paper intends to analyse the operational aspects of PDS at the grassroots level. It examines the consumers responses to various issues in the PDS like quality, price, availability and accessibility of food grains supplied under PDS, behaviour of dealers of FPS with the customers and also the experiences, complaints and grievances of people in the overall functioning and effectiveness of PDS in Sangrur district of Punjab.

2.6 Based on National Food Security Act (NFSA)

2.6.1 Dr. Uttam Haldar, Dr. Dipika Basu, (2018)Implementation Status of National Food

Security act (NFSA) in Drought Prone Bankura District of West Bengal This paper examines the implementation status of the National Food Security Act (NFSA) 2013 in a drought prone district of Bankura in West Bengal. The “Khadya Sathi Prakalpa”, a scheme of Government of West Bengal, coordinates NFSA and Rajya Khadya Suraksha Yojana (RKSJ) to increase the scope of NFSA to ensure food and nutritional security to the vulnerable and poor. The scheme was implemented on 27th January 2016 in Bankura. Simple analytical approach is used to analyse data collected from randomly selected 424 households spread over 4 blocks of the district. In spite of delayed implementation of NFSA, there is a wide coverage (85.6% of sample population) of the Khadya Sathi Prakalpa of the people living in Jangalmahal areas in West Bengal. Government supportive system towards the food basket improves cereal consumption to the great extent of about 20-22% across different social groups in between before and after NFSA. Share of PDS in household’s cereal consumption requirement is estimated to be 98, 80.18, 70.25, 68.18 and 69.88 per cent for AAY, OBC, ST, SC and Others respectively. The scheme has great potentiality to remove hungry people particularly those are living in drought prone areas of West Bengal. The major concern is that it creates people’s dependency more and more on this highly subsidized scheme and it distorts normal behavior of both agricultural labour and food grains markets.

2.6.2 Swapna Moyee , Priyabhasini Palit , Mamita Dash, National food security act of india and related concerns A major section of the population is malnourished fighting the menace of poverty and hunger. So a compatible food security act should address the issue of not only the quantitative aspects but also the qualitative aspects of food insecurity as reflected in terms of malnourishment and undernourishment. The proposed national Food Security Act (NFSA) aims to address the issue of providing food security to the Indian population. The policy makes special provision for the vulnerable groups like women and children and also seeks to reform the PDS.

2.7 Based on Consumer Satisfaction Towards Public Distribution System

2.7.1 Ateendra Tiwari , A Study On Consumer Satisfaction Towards Public Distribution System The implementation of PDS varies across states. This paper studies the execution of the scheme in New Delhi. For the ease of administration, Delhi is sub-divided into 70 circles. Each circle corresponds to an assembly constituency. The total number of fair price shops (FPS) as in May

2012, were 2491 and the number of kerosene oil depots (KOD) were 2356. FPS distributes limited quantity of specified commodities depending on the kind of ration card. In the paper, fair price shops are used interchangeably with PDS shops. The essential commodities that may be sold through PDS are specified by gazette notification from time to time². Presently, the essential commodities distributed at subsidized prices via PDS include wheat, rice, sugar and kerosene.

2.8. Based on Perception of fair price shop's dealers towards public distribution system

2.8.1 Gurdeep Kaur Ghumaani and Pawan kumar Dhiman (2016) Perception of fair price shop's dealers towards public distribution system The PDS (Public distribution System) network in India is executed by the accomplishment of certain steps which include procurement, storage, movement, distribution and sale of food grains. It works with the prime intent to procure food grains from the farmers at remunerative price, thereafter distributing them to the consumers at affordable price through a network of FPS (Fair Price Shops) or ration shops. The FPSs play an important role in the retail distribution of essential commodities under PDS and the success of distribution system to a greater extent depends on the working of FPSs. This paper deals with the perceptions and problems faced by Fair Price Shops dealers with the functioning of FPSs in three districts of Punjab.

3. NEED OF THE STUDY

Public Distribution System in India is the largest food security system in the world but it is suffering so many challenges like exclusion, inclusion, leakages and illegal sale of food grains, ghost cards and inefficient allocation etc. Government of India has done digitization of public distribution system in many phases to meet out these challenges but due to certain limitations and inefficient working of the associated bodies, targeted objectives could not meet out in all the states especially Uttar Pradesh being the largest state and having largest population in India. There is utter need to study this topic to establish food security and to meet out other objectives of Public Distribution System.

4. GAPS OF THE STUDY

➤ After studying the review in this area, the researcher has found that majority of studies have been done in the area of Effectiveness, performance, transparency, of public distribution system but not specifically about the efficacy of digital reforms of Public Distribution System

- Majority of studies have been done on APL (Above Poverty Line) and BPL (Below Poverty Line) population And not specifically on Priority Household (PHH) and Antyodaya Yojana (AY)
- Majority of studies have been done regarding perception And not about awareness of beneficiaries of public distribution system
- Majority of studies have been done only on ration card holders And not on both ration card dealer as well as ration card holder

5. **SCOPE**

This study aims to:

- Analyse the awareness level , overall development regarding the digitalization of Public distribution sytem
- Benefits and challenges of digitalizing the Public Distribution System

6. **OBJECTIVES**

1. To understand the prevailing public distribution system in India and its different phases of digital reforms
2. To analyse the awareness level of digital reforms of stakeholders i.e. ration card dealer , ration card holder
3. To analyse the contribution of Public Distribution System in overall development of Priority House Hold(PHH) and Antyodaya Anna yojana(AAY) population
4. To construct the suggestive action plan for effective utilization of the digital reforms in the selected area to meet out the targets of public distribution system

7. **RESEARCH METHODOLOGY**

7.1 Research design adopted

Table no. 2: Research design adopted

S.NO.	PARAMETERS	DESCRIPTION
1	RESEARCH DESIGN	Analytical study
2	SAMPLING METHODS	Systematic sampling method
3	SAMPLE SIZE	2052 Respondents
4	SAMPLE ELEMENT	Respondents (Ration card dealers = 72) (Ration card holders= 1980)
5	SAMPLE AREA	Agra District

6	SAMPLE UNIT	<u>Urban area:</u> 09 town (Achhnera ,Bah, Etmadpur, Fatehabad , Fatehpur Sikri , Jagner , Kheragarh , Pinahat , Shamsabad) <u>Rural area:</u> 09 block (Achhnera ,Bah, Etmadpur, Fatehabad , Fatehpur Sikri , Jagner , Kheragarh , Pinahat , Shamsabad)
7	RESEARCH APPROACH	Websites, books, journals, thesis, newspaper, published records etc.

7.2 DURATION

2018 onwards (because major reforms in Public Distribution system took place in 2018 (as mentioned earlier in reforms section of this study))will be taken into consideration for the study purpose

7.3 VARIABLES

Table no. 3: Variables of the study

VARIABLES OF THE STUDY	
INDEPENDENT VARIABLES	DEPENDENT VARIABLES
Digitization	Public distribution system

7.3.1 DESCRIPTION OF THE VARIABLES

Table no. 4: Description of the independent variables

INDEPENDENT VARIABLE	
Digitization	<ul style="list-style-type: none"> • Biometric Infrastructure • Use of GPS technology • SMS based monitoring • Web portals • Internet • DataVisualization • Mobile application • Digital Governance or E-Governance • Smart Phone • Authentic identification of beneficiaries • Awareness regarding digitization of PDS

Table no. 5: Description of the dependent variables

DEPENDENT VARIABLE	
Public Distribution System	<ul style="list-style-type: none">• Reconstruction of PDS i.e. digital reforms of PDS (Aadhaar Seeding in PDS Automation of Fair Price Shops Digitization of Ration Card)• Food and Nutritional security

7.4 DATA COLLECTION

• PRIMARY DATA

Primary data will be collected through Questionnaire and schedule filled through personal visit to ration card dealer and ration card holder

• SECONDARY DATA

Secondary data will be collected through:

- Ministry of consumer affairs ,food and public distribution
- Online ration card management system
- Newspapers: Economic times, Hindustan times etc.
- Research papers, thesis, journals, articles ,etc.
- Related websites: <https://nfsa.up.gov.in/Food/citizen/Default.aspx>

7.5 UNIVERSE:

Beneficiaries i.e. PHH (Priority Household) and AAY (Antyodaya anna yojana) ration card dealers and ration card holders of Agra District will comprise the universe of the study

7.6 SAMPLE AREA AND SIZE:

Selected district i.e. Agra is divided into two categories i.e. rural and urban area . Urban area consists of 14 towns and rural area consists of 15 blocks .

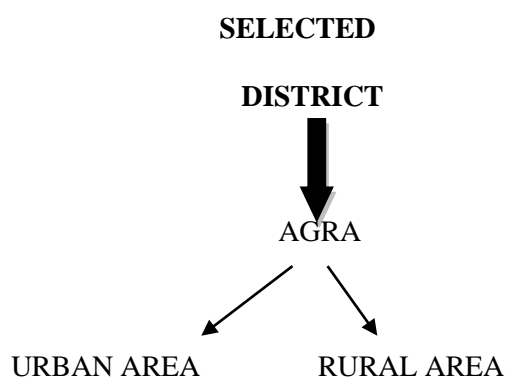


Table no. 6: Selection of ration card dealers and ration card holders as respondents in Urban**Area**

S.. no..	Town	Total Ration Card Dealer	Selected Ration Card Dealer	Total PHH Ration Card	Selected PHH Ration Card	Total AAY Ration Card	Selected AAY Ration Card
1.	Achhnera	7	4	4316	100	37	10
2.	Bah	4	4	2954	100	10	10
3.	Etmadpur	4	4	4260	100	38	10
4.	Fatehabad	5	4	3793	100	84	10
5.	Fatehpur Sikri	7	4	5305	100	37	10
6.	Jagner	4	4	1907	100	37	10
7.	Kheragarh	6	4	3469	100	30	10
8.	Pinahat	4	4	2948	100	10	10
9.	Shamsabad	6	4	4961	100	50	10
	TOTAL		36		900		90

(Source: nfsa.up.gov.in)

Table no. 7: Selection of ration card dealers and ration card holders as respondents in Rural**Area**

S.. no..	Block	Total Ration Card Dealer	Selected Ration Card Dealer	Total PHH Ration Card	Selected PHH Ration Card	Total AAY Ration Card	Selected AAY Ration Card
1.	Achhnera	7	4	4316	100	37	10
2.	Bah	4	4	2954	100	10	10
3.	Etmadpur	4	4	4260	100	38	10
4.	Fatehabad	5	4	3793	100	84	10
5.	Fatehpur Sikri	7	4	5305	100	37	10
6.	Jagner	4	4	1907	100	37	10
7.	Kheragarh	6	4	3469	100	30	10
8.	Pinahat	4	4	2948	100	10	10
9.	Shamsabad	6	4	4961	100	50	10
	TOTAL		36		900		90

(Source: nfsa.up.gov.in)

7.7 SPECIFIC RESEARCH METHODOLOGY**Table no. 8: Specific Research Methodology**

S. NO	OBJECTIVES	METHODOLOGY TO BE FOLLOWED
1.	To understand the prevailing public distribution system in India and its different phases of digital reforms	For achievement of first objective researcher will use reports and documents of government websites to know the numerous reforms and policies
2.	To analyse the awareness level of digital reforms of stakeholders i.e. ration card dealer , ration card holder	Questionnaire and Schedule will be conducted to collect the required information through the beneficiaries from selected area

3.	To analyse the contribution of Public Distribution System in overall development of Priority House Hold(PHH) and Antyodaya Anna yojana(AAY) population	Questionnaire and Schedule will be conducted to collect the required information through the beneficiaries from selected area
4.	To construct the suggestive action plan for effective utilization of the digital reforms in the selected area to meet out the targets of public distribution system	Based on the analysis, an action plan of suggestive measures will be formulated .

7.8 TOOLS AND TECHNIQUES:

Both types of statistical techniques i.e. descriptive and inferential statistics will be used to get reliable results and inferences . Tools like factor analysis ,time series analysis ,regression model ,t-test, Anova, chi square test ,etc. Will be used for analyzing the data as per the nature of the data and requirement of the study .

7.9 IMPLICATION OF THE STUDY

This study will be helpful for government , policy makers , researchers and Priority Household (PHH) and Antyodaya Anna Yojana (AAY) beneficiaries to curb the leakages and to achieve the objectives of public distribution system

8. PROPOSED CHAPTER PLAN OF THE STUDY

Table no. 9: Proposed chapter plan of the study

CHAPTER-1	Introduction
CHAPTER-2	Review of Literature & Research framework
CHAPTER-3	Efficacy of digital reforms of Public Distribution System
CHAPTER-4	Data Analysis & Interpretation
CHAPTER-5	Findings, conclusion & suggestions
Annexure	References & Bibliography
	Appendix

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APPENDIX**DISTRICT : AGRA****Table : Urban Area**

S. N O.	TOWN	PHH		AAY		TOTAL	
		Ration Card	Beneficiary	Ration card	Beneficiary	Ration card	Beneficiary
1	Achhnera	4316	18762	37	114	4353	18876
2	Agra (CB)	0	0	0	0	0	0
3	Agra(MCorp.)	242654	1053935	2055	6583	244709	1060518
4	Bah	2954	12268	10	37	2964	12305
5	Dayalbagh	171	678	49	156	225	834
6	Etmadpur	4260	17729	38	107	4261	17836
7	Fatehabad	3793	15802	84	300	3856	16102
8	Fatehpur Sikri	5305	25439	37	96	5342	25535
9	Jagner	1907	8150	37	95	1928	8245
10	Kheragarh	3469	14635	30	114	3495	14749
11	Kiraoali	4110	18564	44	166	4162	18730
12	Pinahat	2948	13063	10	26	2981	13089
13	Shamsabad	4961	21938	50	144	4976	22082
14	Swamibagh	271	1071	25	75	298	1146
	TOTAL	281119	1224776	2507	8038	283216	1232814

Table : Rural Area

S.no.	Block	PHH		AAY		Total	
		Ration card	Beneficiary	Ration card	Beneficiary	Ration card	Beneficiary
1	ACHHNERA	34432	142379	566	1860	34998	144239
2	AKOLA	26885	103549	460	1516	27345	105065
3	BAH	28966	112713	582	1722	29548	114435
4.	BARAULI AHIR	48647	208609	472	1602	49119	210211
5	BICHPURI	27699	115034	509	1798	28208	116832
6	ETTMADPUR	29579	119570	353	947	29932	120517
7	FATEHABAD	38099	157224	630	1615	38729	158839
8	FATEHPUR SIKRI	27579	111358	479	1619	28058	112977
9	JAGNER	21572	90862	435	1004	22007	91866
10	JAITPUR KALAN	22531	85164	675	2082	23206	87246
11	KHANDAULI	33077	135887	309	798	33386	136685
12.	KHERAGARH	29060	121128	468	1322	29528	122450
13.	PINAHAT	22843	93528	347	990	23190	94518
14.	SAIYAN	28495	120830	340	974	28835	121804
15.	SHAMSABAD	35663	151453	435	1123	36098	152576
	TOTAL	455127	1869288	7060	20972	462187	1890260