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THE FUNCTIONING OF GOVERNMENT SCHEMES UNDER THE FOOD SECURITY ACT

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Abstract

The Food Security Act functions by providing affordable and equitable supply of food for vulnerable populations of India. One such endeavour is the National Food Security Act (NFSA) enacted in 2013 seeking to provide subsidized food grains to two thirds of India's population. Beneficiaries in urban and rural areas have access to rice, wheat and coarse grains at highly subsidized rates. The Act makes pharmaceuticals in priority households under the AAY and the poorest of the poor under the AAY scheme universal by law. Food grains is distributed by the government through a network of Public Distribution System (PDS) outlets which are the principal distribution channels. Rice, wheat and coarse grains are distributed at the rate of 3 kg per person per month at the rate Rs. 3, 2, and 1 per kg, respectively. Furthermore, the Act predicated on Nutritional Support to Pregnant Women and Lactating mothers and Children Below 14 Years. It also stresses on formulating a strong grievance redressal mechanism to make transparent and accountable implementation of these schemes. Besides that, the government is also digitizing the PDS and running targeted programmes to prevent leakages and corruption, taking the PDS system to higher level of efficiency.

Introduction

India's passage towards food security for all its population was marked by the milestone act, the National Food Security Act (NFSA), 2013. The law was meant to enable provision of subsidies on the food grains to the poorest of our country men and women. Amidst the pandemic, food security is a basic human right, and the Act ensures that India's over two thirds population get fit and enough to eat. Mainly the Act relates to the poor and disadvantaged sections of the peoples like families below poverty line, the elderly, women, children, persons with disabilities etc. It tries to cure the hunger, malnutrition & food insecurity in the urban and rural areas through a wide and huge distribution channel through Public Distribution System (PDS). At extremely subsidized rates, the NFSA clearly entitles food grains, guaranteeing a minimum of nutritional support to the needy.

Major schemes implemented by the government under the Food Security Act are meant for the distribution of food grains, namely rice, wheat and coarse cereals by the PDS to Priority Households (PHH) and Antyodaya Anna Yojana (AAY). According to NFSA, the rates at which food grains have to be provided is Rs.3, Rs.2 and Rs.1 per kg for rice, wheat and coarse grains. Similarly, the Act also makes provision for; supplementary nutrition to pregnant women, lactating mothers and children below 14 to augment nutritional security amongst vulnerable groups. To supplement these provisions, the government has begun to digitize the PDS to make it more clean and effective. To reduce leakages, to make sure the rightful distribution of food and to the reduce corruption, there are some technological innovations, including biometric authentication and e-POS machines. The Food Security Act



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reforms aim to provide greater food security in India and greater wellbeing for its disadvantaged population.

Background and motivation

In terms of Indian psyche, country's commitment towards fighting hunger, fighting malnutrition and poverty is the background and motivation behind the functioning of the government schemes under the Food Security Act. Before the passage of National Food Security Act (NFSA), 2013, a majority of India's population suffered from chronic food insecurity, even though India is an agriculturally productive nation. There were many people, particularly from economically disadvantaged communities, who on a consistent basis did not have access to wholesome and affordable food, which directly linked to high degree of under nutrition amongst women and children. India has had great food production, but its distribution system has often been inefficient, ridden with corruption, and unable to adequately reach the most vulnerable. As a result, the NFSA was conceived as a legal guarantee for food security, which would guarantee to every citizen – and especially the poor - access to sufficient, quality food at reasonable prices. The Act was motivated by the need to ensure sustenance, to improve public health and nutritional standards; inadequate nutrition was regarded as a major barrier to economic productivity and social development. To institutionalize food security and reduce inequities in access to the same, with the introduction of targeted food distribution schemes such as the Public Distribution System (PDS), the government has come up with the NFSA. Apart from that, the will to address structural problems like corruption, leakage and inefficiency within the PDS motivated the innovations of technological innovations for example for biometric authentication and digital tracking systems that increase transparency and ensure that the benefits go to the intended beneficiaries. In effect, the NFSA is part of a larger effort to address hunger and malnutrition using a social justice and equitable approach throughout India.

Legal framework and objectives

The objectives and the Legal Framework of the National Food Security Act (NFSA), 2013 is intended to guarantee a legal entitlement to food security in the country. The Act was an attempt to address widespread hunger, malnutrition and food insecurity and discharge the constitutional imperative to recognize the Right to Food as embodied in Article 21 of the Indian Constitution. Food security provides the legal basis to ensure that every citizen, in particular vulnerable and marginalized populations, has access to adequate and nutritious food, and that food is available at all times within a normal walk or drive from home, at affordable prices. The NFSA describes a comprehensive strategy to attain food security which includes food availability and also access to food, with the objective of reducing hunger and undernutrition.

The primary objectives of the NFSA are:

1. Ensuring Access to Food: The Act ensures that eligible households receive subsidized food grains, including rice, wheat, and coarse cereals, through the Public Distribution



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System (PDS). The goal is to provide food to approximately two-thirds of India's population, with specific entitlements for Priority Households (PHH) and Antyodaya Anna Yojana (AAY) households, which are the most disadvantaged.

- 2. Improving Nutritional Security: The Act mandates that special nutritional programs are designed for vulnerable groups such as pregnant women, lactating mothers, and children below the age of 14. This ensures that food security is not just about quantity, but also about providing food that meets basic nutritional standards.
- 3. Accountability and Transparency: The NFSA includes provisions for monitoring, grievance redressal mechanisms, and transparency, thereby promoting efficient and effective implementation. Through technological interventions like biometric authentication, the Act also aims to reduce corruption and leakage within the distribution system.

The legal framework of the NFSA seeks to address the problem of food insecurity through a rights-based approach, ensuring the right to food is protected for all citizens.

Government Schemes and Their Implementation Mechanisms

Government Schemes and Their Implementation Mechanisms under the National Food Security Act (NFSA) are designed to ensure that the entitlements for food security reach the intended beneficiaries in an effective and efficient manner. These schemes primarily focus on the **Public Distribution System (PDS)**, which is the backbone of food security in India, along with supplementary nutrition programs for vulnerable groups.

- 1. **Public Distribution System (PDS)**: The main delivery mechanism for supplying subsidized food grain under the NFSA is the PDS. Through the network of Fair Price Shops (FPS) operated across the country eligible households are entitled to receive food grains such as rice, wheat and coarse cereals at highly subsidized rates through a point sale system. Monthly entitlement under the Act is uniform at 5 kg per person to PHH and 35 kg per family to AAY households. The PDS seeks to solve the same issue of food accessibility that bedevils those who cannot afford market prices. Digitization of the distribution process ensures that food gets to the beneficiaries and there is no diversion of who is to consume the food.
- 2. **Supplementary Nutrition Schemes**: It also orders nutritional support to be made available to pregnant women, lactating mothers and children below 14 years of age. The objective is to improve nutritional status of the most vulnerable populations. Under the Integrated Child Development Services (ICDS) scheme, these groups are entitled to meals from Anganwadi Centers or take home rations. Amongst other things, this is especially important in the fight against malnutrition among children and maternal health causes.
- 3. Targeted Public Distribution System (TPDS): The NFSA has strengthened the TPDS by targeting food subsidies to the most deserving households. The identification of eligible beneficiaries is carried out through the Socio-Economic Caste Census (SECC) or through state-level identification processes. While the



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- system is intended to target food assistance to households in need, challenges such as misidentification and exclusion errors have been addressed through continuous refinement of databases.
- 4. **Technological Integration**: The implementation mechanisms under the NFSA have been significantly enhanced through technology. Initiatives like biometric authentication, e-POS machines, and digital ration cards have been introduced to eliminate corruption, streamline food distribution, and ensure transparency. These technologies help in tracking the movement of food grains, reducing leakages, and preventing fraud. The digitization of the PDS system allows for real-time monitoring and enhances the accountability of the scheme.
- 5. **Grievance Redressal Mechanism**: To ensure accountability, the NFSA has established grievance redressal mechanisms at the district, state, and national levels. Beneficiaries can report issues related to non-receipt of entitlements, misidentification, or diversion of food grains. These systems are designed to resolve complaints efficiently, thereby increasing the confidence of the public in the schemes.

With a multi factorial approach, the government schemes under NFSA enable the achievement of food security. The government aims to leave no one behind to get their due food entitlements through direct distribution of food grains through PDS and targeted nutrition programs along with use of technology for monitoring and transparency.

Technological Advancements and Innovations in PDS

The Public Distribution System (PDS) has greatly benefitted from Technological Advancements and Innovations ensuring it to work more effectively, transparently and also with accountability. One such innovation has been in the form of the integration of biometric authentication into design and delivery of food subsidies, to make sure food subsidies end up being accessed by the right beneficiaries. Through a link to ration cards (biometric data via fingerprints or iris scans), the government has largely eliminated fraud and diversion of food grains. Electronic Point of Sale (e-POS) devices in Fair Price Shops (FPS) have made the process much simpler. These can track food distribution in real time, so beneficiaries and authorities can see transactions in real time. By digitally issuing ration cards, paper based systems have been replaced with systems to better manage entitlements and reduce errors in beneficiary identification. The shift of this technology enhances the smooth delivery and allocation of subsidized food grains and in addition increases transparency and efficiency of the whole system.

Besides these, the government has opted for data driven solutions to monitor and improve the performances of PDS. Physical and on scene planning provides up to date information on the location of FoodGrains Bank warehouses. Geographic Information System (GIS), data analytics are also used to assess the availability of food grains across regions, identify gaps in coverage and suggest ways to optimize supply chains. These help in making sure food grains are delivered in time and in right quantity. Mobile apps for beneficiaries to know their entitlements, as well as grievance redressed portals have made citizens more able to access



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information and lodge complaints. The goal of these technological innovations is to reduce inefficiencies, forestall corruption and develop a more user friendly, less corrupt distribution system for food under the NFSA with the promise of improved food security outcomes.

Related Work

Tanksale, A., & Jha, J. K. (2015). As it is, there have been too many obstacles and hurdles in the implementation of National Food Security Act (NFSA) in India, although it has the potential to end hunger and malnutrition in the country. Passed in 2013, the NFSA sought to ensure subsidized food grain supplies to about two thirds of the population of India via the Public Distribution System (PDS). Although the Act has done well, millions more are fed, there are still leakage, administrative inefficiency and corruption problems. However, a substantial quantity of grain food reaches the beneficiaries because of malicious diversion, mislabeling, and counterfeit actions at the distribution network. The problem is further complicated by targeting errors (i.e. not including deserving households) and regional disparities in implementation. Biometric authentication and e-POS systems are technological innovations that have been introduced to increase transparency, yet problems like an inefficient supply chain, and a limited variety of food continue to be a problem for nutritional security. Also, there is the neglect of the vulnerable groups and dependence on very limited set of food grains which results to continued nutrition deficiencies. There is a need to overcome these challenges with better coordination, refined targeting mechanism and a broader focus on dietary diversity; so that the NFSA can deliver its goal of overall food security.

George, N. A., & McKay, F. H. (2019). India is committed towards ensuring sufficiency of food grain among the vulnerable populations and the Public Distribution System (PDS) is fulfilling this role. PDS is aimed under the National Food Security Act (NFSA) to provide rice, wheat and coarse grains to about two thirds of India's population at an affordable price. Although the system is of monumental importance, it has a litany of problems ranging from leakages to corruption making a corrupt food distribution system. Furthermore, targeted errors and different regional implementation aggravate the issue of food insecurity. Although biometric authentication and e Pos systems improved transparency and accountability, operational problems still exist. While instrumental in dealing with such problems as food access, the PDS is in need of continued reform aimed at improving its efficiency, expanding coverage, and providing nutritional security above all to the most vulnerable groups, viz. women and children.

Balani, S. (2013). In recent decades, India has made progress towards food security that is attributable to such government initiatives as the National Food Security Act (NFSA) and the Public Distribution System (PDS). This has allowed for efforts to fight hunger and malnutrition and state to reach millions of vulnerable households. But it still faces significant barriers to effective implementation such as leakages, corruption, distribution inefficiency and targeting errors. Uneven delivery of food is further complicated by uneven development and poor infrastructure, especially regional differences. Also, the dependence of the system



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on a restricted assortment of grains has made for nutritional inadequacies, particularly among women and children. Technological developments such as biometric authentication and digital ration cards have increased transparency, however, structural weaknesses in food security programs require more policy reform. A more holistic view is required to achieve sustainable as well as inclusive food security in India.

Narayanan, S. (2015). Given India's vast population, high level of poverty and wide malnutrition, food security is an urgent imperative. However, the government, albeit with its failure, has made efforts to provide people with access to inexpensive food through its schemes like the National food security act (NFSA) and the Public distribution system (PDS). These measures have helped in wresting hunger, but are plagued by inefficiency in food distribution, leakages, corruption and targeting errors, which prevent food from reaching those entitled to receive it. Moreover, nutritional security is a matter of concern since PDS supplies a fairly restricted variety of grains contributing to the deficiency of diets. Lack of uniform standards, regional disparities, poor infrastructure and failure to address the plight of the marginalized communities around the world further undermines the system. Finally, to overcome with these challenges India needs to continue with the reforms, technological innovations as well as a broader perspective of providing food as well as nutritional adequacy for all of its citizens.

Challenges in the Functioning of Government Schemes

Although technological advancements and policy reforms have improved the situation, issues associated with the Functioning of Government Schemes under the National Food Security Act (NFSA) are multi faced. Leakages and diversion of food grains are one of the major issues of concern, because nearly a large amount of food grains are not reaching intended beneficiaries. While in remote or underdeveloped areas corruption, inefficiencies and lapses in the monitoring process causes it. Some regions still suffer from the 'ghost beneficiaries' and fraud problem, even with digital systems in place. Furthermore, delays in food grain delivery and timely action in areas hit by food shortage or emergency are also caused by administrative inefficiency and lack of coordination between central, state and local authorities.

The second challenge has to do with identifying and targeting beneficiaries. The Socio Economic Caste Census (SECC) was supposed to deliver data through which we could reliably identify the most vulnerable of households but misidentification and exclusion errors have been recurrent. The system excluded many deserving families, especially from the economically weaker sections, but continue to give benefits to many ineligible ones. In addition, food security access is uneven by state and across geographies. Those states with better infrastructure and governance tend to perform better, if otherwise, a state with a weak administrative capacity ends up not doing an efficient delivery. Further, nutritional deficiencies continue despite the NFSA aim to provide adequate nutrition primarily to women and children. This is because in places where it is rural, over reliance on a few food grains such as wheat and rice reduces dietary diversity thereby compounding malnutrition.



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Eventually, with climate related disruptions – such as droughts, floods or poor harvests – affecting food availability it is even harder to keep up with growing demand under the scheme. Systemic and operational challenges require sustained reforms to and monitoring of the programme to confirm that benefits to the most vulnerable actually occur.

Comparative Analysis: India's Food Security Model vs. Global Practices

Comparative Analysis: India's Food Security Model v/s Global Practices discusses India's unique approach to the provision of food security under the National Food Security Act (NFSA) incorporating thereby some of the best food security practices globally. India relies on its Public Distribution System (PDS) as the key to its food security model which covers around two thirds of India's population. Targeted schemes like the Antyodaya Anna Yojana (AAY) where the food grains reached even higher share to the poorest families support this. The system deals with both food availability and accessibility to the ablest households, pregnant women, lactating mothers and children. In contrast, India's model places a strong emphasis on rights (rights based entitlement) making food a legal entitlement, unlike a charitable or welfare approach. It is one of the few countries that grant such food security a place in its constitution.

India's system is compared to global practices and the challenges of distribution inefficiencies, leakages and in targeting errors. For example, Brazil has taken the universal approach by adopting a Bolsa Família Program aimed at transferring conditional cash to low income families in order to make purchase from the market for food. Brazil's model isn't based on distribution of subsidized food, but instead gives families the resources to empower themselves with direct income support. However, Mexico's Oportunidades Program and South Africa's Social Grants instead take the form of direct cash transfers to vulnerable populations where the aim is to reduce food insecurity through financial inclusion.

In developed countries such as the United States, there are food assistance programs such as the Supplemental Nutrition Assistance Program (SNAP) that has also adopted digital platforms for purposes of efficient targeting and distribution of the assistance. Though these models all want the same – healthier, better fed citizens – the way they intend to get there is very different. While India has made recent strides in technological advancements that increase food distribution efficiency, it continues to heavily rely on physical, food distribution through the PDS, which is still subject to inefficiencies such as corruption and higher food waste, compared to cash transfer models, which have the potential to be more flexible and efficient in addressing individual dietary preferences and needs. However, countries such as China have blended food security with overall agricultural objectives of self-sufficiency and food production unlike India's distributive approach.

The study compares and contrasts India's food security model vis a vis other countries and finds that, though legally and through entitlements strong, the implementation can be a source of weakness and benefits from some of the global best practices in this area including direct cash transfers and more inclusive agricultural policies.



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Impact Assessment of NFSA on Food Security

The assessment of the impact of the National Food Security Act (NFSA) on food security in India shows both important progress and ongoing problems. The NFSA has had a large positive impact on the food access situation evidenced by the fact that two thirds of the country is now included under the delivery of the Public Distribution System (PDS) offering subsidy based access to rice, wheat and coarse cereals. This has greatly cut hunger and maintained a steady supply of food for millions of vulnerable households—mainly in rural and remote areas. Furthermore, the Act has prioritized targeted nutrition to pregnant women, lactating mothers and children below 14 years, which has resulted in to have much improved nutritional outcomes in some regions, particularly on women and children nutrition. Although this has been accomplished, there are always leakages and administrative inefficiency, plus corruption, which prevent the NFSA from achieving its full potential. Even a substantial portion of food grains do not reach the intended beneficiaries because of diversion at different levels of distribution. Further, the concentration on subsidized grains, such as rice and wheat, has failed to address the nutritional dimension of the food provided resulting in persistent problems of malnutrition. While there are technological innovations such as biometric authentication and digital ration cards that make programs more transparent, targeting errors and exclusion of vulnerable groups persist in some states. In general, the NFSA has significantly contributed to food security, however its effects have been hampered by operational and systemic problems necessitating governance, distribution and beneficiary targeting reforms.

Problem Statement

Challenges relating to the operation of government schemes under the National Food Security Act (NFSA), inhibit the successful implementation of food security schemes in India. Even though the legal framework is meant to entitle subsidized food grains to two thirds of the population, leakages, corruption and inefficiency continues to impede the reach, and effectiveness of the Public Distribution System (PDS). It is a reality that a major part of food grains entrusted to reach the intended beneficiaries fails reaching them due to diversion at various levels of distribution, particularly in inaccessible or rural areas. The problem has been further compounded by inaccurate targeting and misidentification of beneficiaries, with some eligible households denied the system, and others who are not even eligible continuing to benefit. Biometric authentication and electronic Point of Sale (e-POS) devices were introduced as technological advancements that enhance transparency of the system while some administrative bottlenecks and operational inefficiencies that were in the system before still remain. While regional disparities in delivery of the NFSA intensify an already very unequal pattern of food access, weak administrative capacities of states accentuate the problem. In addition, there is a problem of limited dietary diversity in the food supplied under schemes like wheat and rice, which has resulted in ongoing nutritional deficiencies, most drastically felt through vulnerable groups like women and children. Rapid reforms are required in the PDS, in the implementation of better targeting mechanisms, and enhancing



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coordination across various levels of government to get the NFSA food security services delivered effectively and equitably.

Conclusion

The National Food Security Act (NFSA) has certainly made considerable progress in overcoming food insecurity and supplying subsidized food to millions of Indians, yet the running of government schemes under the Act continues to be low key with a host of challenges that need to be addressed for more effectiveness. Although a vital mechanism, the Public Distribution System (PDS) continues to be affected by internal inefficiencies, corruption and misidentification of beneficiaries thus preventing aid to reach the most vulnerable populations. Advances in technology like biometric authentication and digital ration cards have helped to make the system more transparent, though leakages and administrative bottlenecks remain rampant, especially in rural areas. Additionally, the dependency upon a restricted assortment of grains has created dietary inadequacies in specific segments of the populace, undermining the general target of upgrading general wellbeing. There are also inconsistencies in the way in which the NFSA is implemented across states, leading to regional disparities which restrict overall impact of the schemes from being reached. To make the Act succeed, government must pay necessary attention to streamline distribution functions, better direct the beneficiaries and adopt a more holistic, multifaceted view of food security beyond calories. Some of the challenges, such as a lack of adequate coordination between central, state and local authorities; weak infrastructure; and absence of proven global best practice like cash transfer systems can be overcome by building of stronger coordination between central, state and local authorities; investment in infrastructure and incorporation of international best practices like cash transfer systems. We should steer India towards creating a more efficient, equitable, and sustainable food security system that not only makes sure that people have enough to eat, but that the food they eat is of a good nutritional quality, and in the interest of the people who are most vulnerable.

Future Work

Future work employed for better functioning of government schemes under National Food Security Act (NFSA) should focus on the following areas. Beneficiary identification, in particular, is a critical area to refine to reduce exclusion errors and to ensure that the most vulnerable populations get what they are entitled to. With better targeting, real time monitoring and more accurate data collection methods, an integrated approach including the right advanced technologies e.g. AI driven systems, can be used. Moreover, there is a need to expand the coverage of the schemes to marginalised groups, such as those who are left out on the basis of faulty databases in making the schemes benefition more inclusive at grassroots level.

A second area is the diversification of food available under PDS to include a number of nutritious, locally available cultivars, not only providing calories but also improving dietary diversity. The attention must instead move towards adopting a holistic nutrition approach



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with consideration of the needs of vulnerable groups towards poor socio economic conditions, like pregnant women, children and the elderly. In addition, cash transfer programs or vouchers can be explored as alternatives or complements to direct food distribution, which directly gives beneficiaries control of expenditure of funds on foods meeting their own needs. Efforts must continue to minimize supply chain inefficiencies and strengthen grievance redressed mechanism to ensure that the food gets to the beneficiaries in adequate quantities, and in time. Efforts at both state and central governments levels and involvement of community are expected to overcome the challenges of implementation and to establish a sustainable and equitable food security system for the future.

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