

FOOD SECURITY THROUGH EFFECTIVE MANAGEMENT OF WAREHOUSING SECTOR: A STUDY OF KARNATAKA STATE

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Abstract

Making a minimal amount of food grains available to the whole population is the main definition of food security. However, in a developing economy, this idea changes when the society reaches a different level of development. The four progressively evolving stages of food security can be seen from this perspective. From the standpoint of human survival, food security might be considered the most fundamental necessity to ensure that everyone has access to a sufficient amount of cereals. Agricultural production, urbanization & migration, malnutrition, the monsoon and water scarcity, distribution networks, socioeconomic policies, climate, and environmental issues are some of the elements that affect food security in our nation. In India, food security remains a critical challenge due to the nation's vast and diverse population. Effective storage and warehousing management play a pivotal role in addressing this challenge, particularly in states like Karnataka, where agricultural productivity is substantial but unevenly distributed. The role of storage and warehousing in food security involves not only the preservation of harvested crops but also the optimization of supply chains to prevent loss and ensure timely distribution. The present study examines the efficacy of the warehousing sector in ensuring food security. The study also emphasizes the need for food security and reviews its various issues related to self-sufficiency, malnutrition, poverty, and distributive justice approach keeping in view the role played by the Public Distribution System (PDS).

Keywords

Food Security, Self-sufficiency, Warehousing Sector, Storage, Karnataka State

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Introduction

Making a minimal amount of food grains available to the whole population is the main definition of food security. However, in a developing economy, this idea changes when the society reaches a different level of development. The four progressively evolving stages of food security can be seen from this perspective. From the perspective of human survival, food security might be considered the most fundamental necessity to ensure that everyone has access to a sufficient amount of cereals. A period of food security, defined as a sufficient supply of pulses and cereals, comes after this one. Cereals, legumes, and dairy products should be included in a later stage of development. The availability of grains and pulses is taken into account when discussing food security in the highly developed period. Meat, fish, eggs, veggies, and milk products. In this environment, India's overall situation is bleak. Despite the fact that food production is now self-sufficient, the populace still does not have access to a balanced diet. Although the average per capita intake of cereals has remained reasonable and cereal output has kept up with the growing demands, it is concerning that both production and per capita consumption of pulses have decreased. Fruit and vegetable output is still at a low level (Ninth Five-Year Plan). Three perspectives can be used to study food security. The first is food availability, which is influenced by production and distribution; the second is food access, which is determined by purchasing power; and the third is food absorption. – Former Indian President APJ Abdul Kalam. “Our nation has shown that food security is a cornerstone of our economic security, while economic security contributes to national security along with additional forms of societal security like health security, education, and employment opportunity,” he said in his speech at the National Food Security Summit's closing ceremony. The noble goal of India's food security strategy is to guarantee that food grains are available to the whole public at a reasonable cost. Poverty and the issue of food security are complex. In addition to helping to create mass jobs, free trade in grains and increased sustainable foodgrain production would also help to lower the rate of impoverishment in rural areas. (Yojna, April 2004, Vol.48, No.4, P.5).

Food grain security is integral to the stability of global food systems and the overall health of populations. Warehousing serves as a critical component in the food supply chain, providing storage solutions that ensure the safety and quality of food grains until they reach consumers. However, the warehousing sector faces numerous challenges that can compromise food grain security, including inadequate storage conditions, pest infestations, theft, and climate change impacts.

Objectives of The Study

The effectiveness of the warehousing industry in maintaining food security is examined in this study. The study also emphasizes the need for food security and

reviews its various issues related to self-sufficiency, malnutrition, poverty, and distributive justice approach keeping in view the role played by the Public Distribution System (PDS).

Review of Literature

Maintaining food security is still a difficult problem that is crucial for growing nations like India. We can begin evaluating the degree of food security and prioritizing our efforts to attain it by using the Millennium Development Goals as a guide. The first

World Development Report (1986) defined food security as “access by all people at all times to enough food for an active, healthy life. Food security was defined by the “Food and Agriculture Organization (FAO)” in 1983 as “ensuring that all people at all times have both physical and economic access to basic food they need.”

In summary “When all people at all periods have a source of enough nutritious, secure food for living a fit and active life,” is what is meant by food security. Food accessibility, consumption, and sustainability are all components of food security, as is the sufficient physical accessibility of food for every citizen of a nation. According to M. K. Singh’s research, our nation is still in its infancy when it comes to food security, even if independence in foodgrains along with other agricultural goods is still one of the fundamental objectives of Indian planning. The populace still does not have access to a regular diet, despite the fact that food production is now self-sufficient. The production of food grains has expanded dramatically as a result of the Green Revolution’s effects, which include altered seed-water fertilizer policies in the past, globalization, and economic reforms implemented after 1991. It has more than quadrupled in the past half-century. Currently, food grains can be exported in place of being imported. There is an accumulation of government stock. However, the growth in beans and other nutrient-dense foodstuffs is somewhat depressing. Over the past fifty years, the amount produced by pulses has barely doubled. The area increment in pulses shows a downward tendency. A major disadvantage for food security is that, while the per capita net accessibility of food grains has somewhat improved for cereals, it has stayed half for pulses. Although foodgrain production trends show a significant increase, food security can’t be attained without a rise in net availability. Globalization has undoubtedly had a favorable impact on the nation’s food grain production, but it cannot last in the long run unless revenue is distributed fairly and the benefits are sustained for the masses. The only option is to maintain the agricultural expansion that has already been attained in conjunction with an appropriate and sound distribution system. It is imperative that the Public Distribution System (PDS) undergo a gradual redesign. Overall, only until the population’s purchasing power rises over the poverty level will the mass populace be able to access food items.

The production of food grains in the nation has undoubtedly benefited from the process of globalization, but it cannot be sustained over the long term without a fair income distribution and the extension of the advantages to the public. The only option is to maintain the agricultural expansion that has already been attained in conjunction with an appropriate and sound distribution system. It is imperative that the Public Distribution System (PDS) undergo a gradual redesign. Above all, the increased purchasing power is the only thing that can enable the mass populace to have access to food items. The current imperative is to raise the population out of poverty. Primarily developed by A.K. Sen (Sen, 1981) is an attempt to explain the causes of famines and their consequences for different groups of people. This approach is a significant departure from earlier explanations of food availability. However the application of this approach to explain endemic hunger and food security is not yet considered perfected (Osmani, 1995). In modern India, food security is influenced by a variety of factors including agricultural productivity, urbanization and migration, malnutrition, weather monsoons and water scarcity, agricultural productivity, distribution systems, socio-economic policies, climate and environmental challenges. Chaudhary, Jyoti et al., (2024) There are around 828 million people who do not have sufficient food, and there are 49 million people who are suffering an emergency degree of hunger. World hunger is one of the primary concerns that are faced all over the world. However, despite the fact that India is the most populated nation in the world, the country has had consistent economic development and a rise in the production of food grains. Rajan Shivakami et al., (2022) Health problems are a direct result of food insecurity, which is often referred to as “hunger.” As a result of the dilemma of food poverty, global economies have begun to incorporate private companies and public engagement in markets. Through the use of the public-private partnership (PPP) model, a number of governments have investigated ways to reduce the prevalence of food insecurity.

Discussion

Effective management of warehousing and storage systems is essential for achieving food security. Effective storage and warehousing management play a pivotal role in addressing this challenge, particularly in states like Karnataka, where agricultural productivity is substantial but unevenly distributed. The role of storage and warehousing in food security involves not only the preservation of harvested crops but also the optimization of supply chains to prevent loss and ensure timely distribution. In Karnataka, with its varied climatic conditions and agricultural practices, robust storage systems are essential to manage the seasonal surplus and shortages of food grains. Adequate warehousing facilities help mitigate the risks of

spoilage, pest infestation, and quality deterioration, thereby enhancing the overall efficiency of the food distribution network. By implementing advanced storage technologies and efficient warehouse management practices, Karnataka can improve its food security status by reducing post-harvest losses and stabilizing market prices. Furthermore, well-managed storage systems facilitate better procurement and distribution strategies, ensuring that food resources are available where they are most needed. By making sure that food is available, reasonably priced, and safe for all facets of the population, this strategy not only benefits the agriculture industry but also advances the larger objectives of food security. As such, the study of storage and warehousing management in Karnataka provides valuable insights into optimizing food security strategies, highlighting the importance of infrastructure development and management practices in achieving sustainable food security across the region. Many of the state's many enterprises, such as industrial, retail, e-commerce, and agriculture, rely on efficient storage and warehousing facilities. The research evaluates the efficacy of current policies and programs targeted at updating storage infrastructure by examining both public and private sector efforts. Implementations such as Integrated Warehousing Complexes and the Construction of Cold Storage Chains were assessed for their effectiveness in decreasing food waste and increasing supply chain efficiency. The research also shows how to improve warehouse management by using new solutions and best practices. Some of these measures involve investing in rural regions' infrastructure and enhancing logistical cooperation; others include using cutting-edge technology for temperature control, pest management, and inventory monitoring. Comprehensive initiatives to update storage infrastructure, increase regulatory frameworks, and offer financial incentives for infrastructure development are critically needed, according to the results. The optimal condition of agricultural goods reaches consumers in Karnataka, which contributes to food security in the state as a whole, and stable market prices are essential to this end. Good storage and warehouse management is thus essential.

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