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RESEARCH ARTICLE

Forecasting agricultural production and storage needs for major crops in Telangana: Implications for post-harvest management and crop sustainability

Divya Kadakanchi[1*], Dandugudumu Rajini Devi[2], K Suhasini[1] & A Meena[3]

[1]Department of Agricultural Economics, College of Agriculture, Rajendranagar, Professor Jayashankar Telangana State Agricultural University (PJTSAU), Telangana, 500 030, India

[2]Department of Agricultural Economics, Regional Agricultural Research Station, Jagtial, PJTSAU, Telangana, 505 529, India

[3]Department of Agricultural Statistics and Mathematics, College of Agriculture, Rajendranagar, PJTSAU, Telangana, 500 030, India

*Correspondence email - divyakadakanchi@gmail.com

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Abstract

Agricultural infrastructure plays a vital role in agriculture at every single step like for the supply of input, sowing of crops and for the post-harvest management that directly influences the quality and shelf life of agricultural produce. Advancements in plant science, such as the development of genetically improved varieties with extended shelf life, require additional improvements in storage infrastructure to preserve their genetic potential and nutritional value. As a result, Government of India has formulated various kinds of schemes like agricultural marketing infrastructure scheme to improve the capacity of warehouses that has seen a drastic change from 248.73 LMT in 2011 to 671.87 LMT in 2022 with an overall increase of 170.10 per cent. To assess the future storage requirements, ARIMA and CAGR techniques were employed to forecast the warehouse capacity and production of major crops in Telangana for seven years and compared both to find the future requirement of warehouse capacity in Telangana. The projected agricultural production in Telangana continued to rise significantly, reaching 214.02 LMT by 2030 due to improved irrigation facilities, use of improved varieties and disease resistant crop varieties. However, the capacity of warehouses is expected to increase only marginally, from 38.13 LMT in 2024 to 38.85 LMT in 2030. This disparity highlights a growing challenge in storage, as the percentage of production that can be accommodated by warehouses declines steadily from 21.26 per cent in 2024 to 18.15 per cent by 2030. Specifically, by 2030, to accommodate 20 per cent of the total production, a warehouse capacity of 42.80 LMT is needed. If 25 per cent of the production is to be stored, the capacity requirement increases to 53.51 LMT. For storing 30 per cent of the production, a capacity of 64.21 LMT is necessary and if 35 per cent of the production is to be stored, the required warehouse capacity rises to 74.91 LMT. Even though there is an increase in capacity of warehouses and cold storages,still there is a need for storage capacity in future years due to the increase in production of major crops in Telangana.

Keywords: capacity; challenges; production; storage; warehouse

Introduction

Agricultural infrastructure plays a vital role in agriculture at every single step like for the supply of input, sowing of crops and for the post-harvest management. Investment in agricultural infrastructure is important to enhance the productivity and to reduce the post-harvest losses. The global food losses were recorded as 1.3 billion tons as predicted by FAO (1). The estimated economic value of post-harvest losses in India was INR 926.51 billion in 2014 (2) which is 0.6 per cent of the country's GDP and two-and-a-half times higher than the budget of the Ministry of Agriculture and Farmers Welfare (MoAFW) in FY2014. India witnesses nearly, 4.6 to 15.9 per cent wastage in fruits and vegetables, 5.2 per cent in inland fish, 10.5 per cent in marine fish, 2.7 per cent in meat and 6.7 per cent in poultry meat (3). According to "Study to determine post-harvest losses of agri produce in India" in 2022 conducted by NABCONS on behalf of MoFPI, post-harvest losses in India are estimated to be 3.89 to 5.92 per cent in cereals, 5.65 - 6.74 per cent in pulses, 2.87 -7.51 per cent in oilseeds and 6.02-15.05 per cent in fruits and 4.82-11.61 per cent in vegetables (4). Reducing the postharvest losses, could be a sustainable solution to increase food availability, reduce pressure on natural resources, eliminate hunger and improve farmers' livelihoods (5). Post-harvest losses undermine food security by reducing the overall food supply, leading to increased market prices and reduced affordability (6). Higher post-harvest losses lead to increased prices for agricultural products, making nutritious food unaffordable for low-income populations (7). Decayed agricultural produce contributes to greenhouse gas emissions, further exacerbating climate change (1).

In view of the above impacts of post-harvest losses, Government of India has formulated various kinds of schemes to develop agricultural infrastructure such as warehouses, cold storages, marketing infrastructure etc. The capacity of warehouses increased by the government under agricultural marketing infrastructure scheme that has seen a drastic change from 248.73 LMT in 2011 to 671.87 LMT in 2022 with an overall increase of 170.10 per cent. Under capital investment subsidy scheme for cold storages, the capacity of cold storages created had increased to 15.77 LMT in 2022-23 from 1.88 LMT in 2016-17 with an increase of 739 per cent.

Growing production of paddy, red gram and maize result in a constant decline in market price and increased procurement of paddy by state government necessitating the need for more storage space. Therefore, it is necessary to carefully research and contrast the warehouse capacities that are now available and will be required in the future.

Materials and Methods

Among the various field crops cultivated in Telangana, paddy, red gram and maize were selected for this study due to their significant contribution to Telangana's agricultural output. Paddy contributes major portion of Telangana's agricultural production, after paddy, maize and red gram are the most cultivated crops in Telangana, which are even cultivated under rainfed conditions. The production data is collected from indiastat.com (8) for the years 1994 to 2023 that compiles official statistics from various government agencies, including the Ministry of Agriculture & Farmers' Welfare, Directorate of Economics and Statistics and other relevant authorities. The capacity of various warehouses under different entities like FCI (9), CWC and SWC (10) were collected from annual reports and authorized websites *viz.*, fci.gov.in and cewacor.nic.in respectively. Overall, the study uses secondary data for analysis.

To analyze the future requirement of warehousing in Telangana, the total production of major crops in Telangana *viz.*, paddy, red gram and maize were forecasted for 6 years up to 2030 by using ARIMA model (11) and CAGR techniques (12) then compared with the warehouse capacity in Telangana.

Compound annual growth rate

Compound growth rate analysis was conducted to evaluate the growth in the number, capacity and utilization of warehouses for storage. Compound growth rates were calculated using the following formula.

$$Y^t = Ae^{bt} \qquad 1.1$$

Where,

Y^t= number, capacity or utilization of warehouses in year t

t = year which takes values 1,2…n

$$Y^t = Y_o(1+r)^t$$

log transformation of the above i.e.

Log Y^t = Log Y_o +t log (1+r), assuming Log Y_o = log A, Log (1+r) =b Log Y^t = log A +bt

By differentiating d (log Y_t)/dt =b Since b =log (1+r)

Antilog b = 1+r

r = (Antilog b) – 1 r = CGR

CGR in per cent = [(Antilog b)-1] *100

ARIMA Model

ARIMA was selected due to its capability to analyze and forecast time-series data by accounting for trends, seasonality and autocorrelation. It is mostly useful for modeling non-stationary data by differencing and incorporating past values and errors to generate accurate forecasts. In this study, ARIMA was employed to project future warehouse capacity and crop production based on time series data to estimate future storage requirements.

It is used to project future storage requirements in relation to the production of major crops in the state.

ARIMA forecasting involves four steps: identification, estimation, diagnostic checking and forecasting. The best fitting ARIMA model will be selected and the residual for the model is obtained.

The identification step involves plotting the time series data.

Estimation involves choosing the best ARIMA model based on ARIMA model parameters. The model with the least RMSE and BIC values and highest R square value was selected as the best model. SPSS software is used for ARIMA model.

Results and Discussion

Forecasting the production of major crops (paddy, red gram, maize) using ARIMA model

The Fig. 1. shows the forecasted production of major crops (paddy, red gram, maize) from 1994 to 2023 for six years i.e., from 2024 to 2030. Production showed an increasing trend with non-stationarity. The increase in production of paddy is due to improvement in irrigation facilities under Mission Kakatiya in Telangana (13), implementation of Rythubandhu scheme (FISS) led to increase in net area sown and gross area sown (14), alongside usage of high yielding and disease resistant varieties. The production of red grams is affected by rising temperatures and excess rainfall (15). The production of maize is increased using climate resilient varieties (16).

The Auto correlation and the Partial auto correlation functions are presented in Fig. 2 and 3 respectively. The ACF plotted showed that there was non-stationarity in time series data as they were significantly different from zero mean.

The Fig. 4 and 5 plotted for differentiated data shows ACF and PACF plots showed that the time series data was stationary after differentiation.

The model with the least RMSE and BIC values and highest R square value was selected as the best model. Hence, ARIMA (1, 1, 0) was chosen as the best model with RMSE at 19.79, BIC at 6.20 and R-squared at 68.30 per cent.

Fig. 6. presents the forecasted production with the fitted ARIMA (1, 1, 0) model for the period of seven years

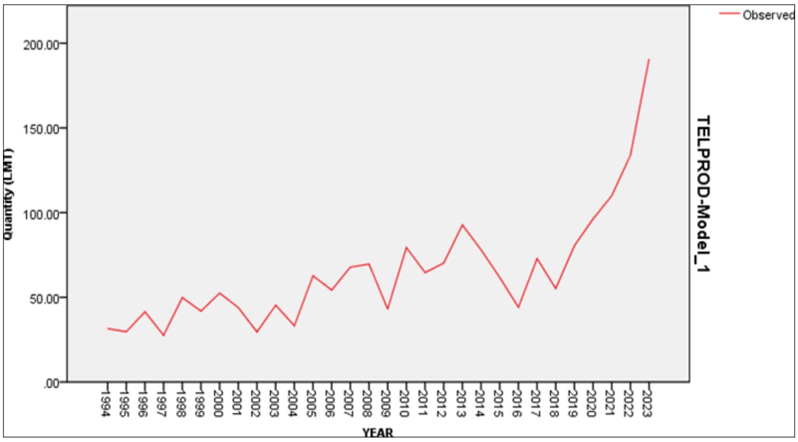

Fig. 1. Time series plot for production.

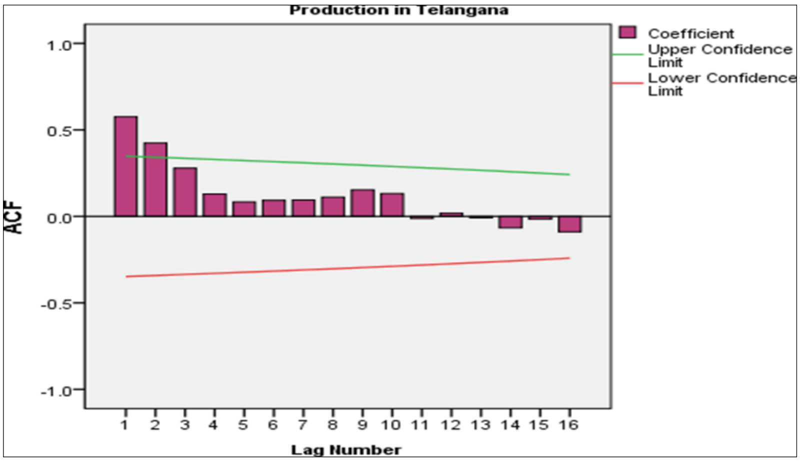

Fig. 2. Auto correlation plot for production.

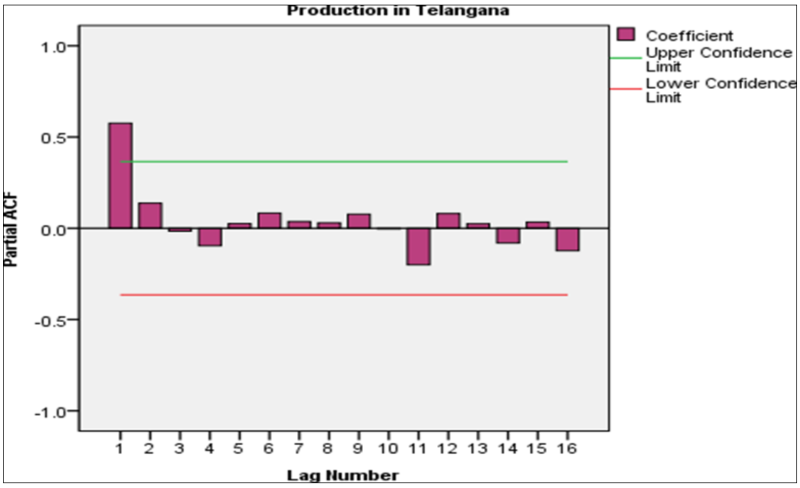

Fig. 3. Partial auto correlation plot for production.

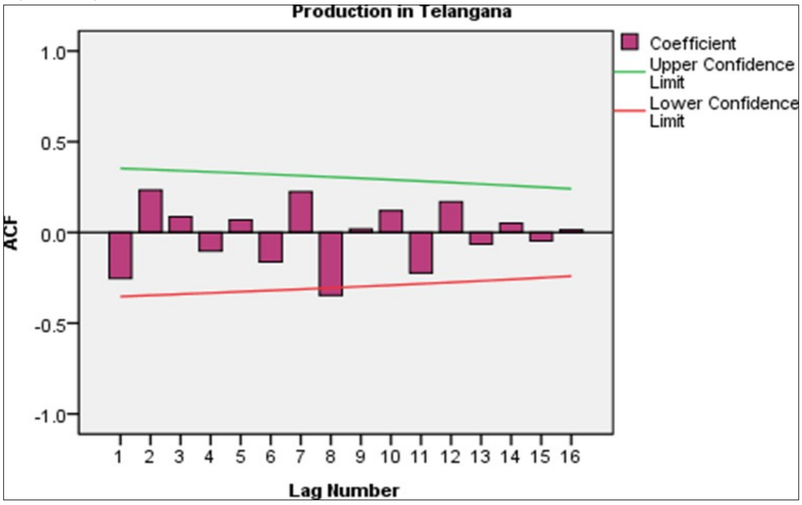

Fig. 4. ACF plot at stationarity.

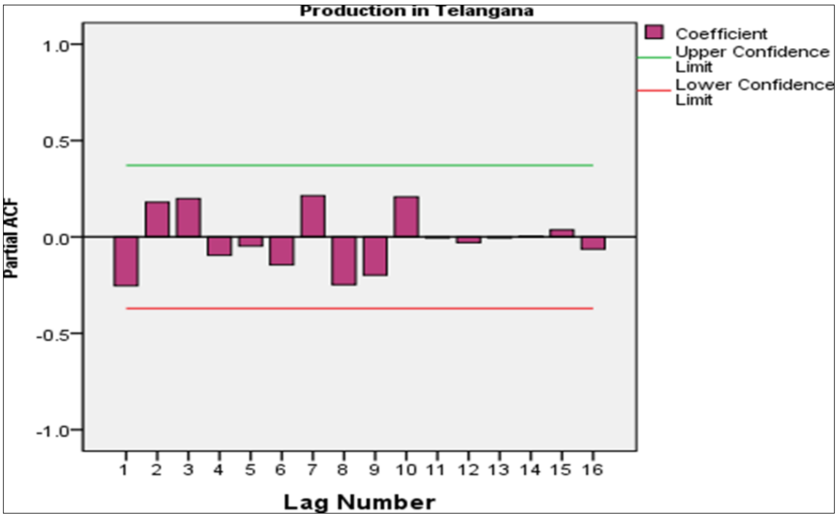

Fig. 5. PACF plot at stationarity.

from 2024 to 2030. The forecasted production values are presented in Table 1.

Table 1. shows that the forecasted production of major crops was in increasing trend as against the results of forecasted rice cultivated area. The production and productivity decrease for the next four years i.e., 2015-16 to 2019-20 (17). Similar type of results was obtained for forecasted wheat (18), Jute (19), pulses (20), rice (21) and Arhar (22).

Forecasting the warehouse capacity using ARIMA model

Fig. 7. shows the time series data of warehouse capacity from 2014 to 2023. The warehouse capacity showed stationarity with any difference. This is confirmed using ACF and PACF plots.

The Auto correlation and the partial auto correlation function is presented in Fig. 8 and 9 respectively, showing the stationarity of the time series data.

The model with the least RMSE and BIC values and highest R squared value was selected as the best model. Hence, ARIMA (0, 0, 1) was chosen as the best model with RMSE at 11.28, BIC at 5.31 and R-squared at 23.20 per cent.

Fig. 10. presents the fitted ARIMA (0, 0, 1) the warehouse capacity was forecasted for the period of seven years from 2024 to 2030. The forecasted warehouse capacities are presented in Table 2.

Comparative analysis of forecasted production with forecasted warehouse capacity

For forecasting the future need of warehouse capacity in the coming years, the forecasted production (paddy, maize, red gram) in Telangana is compared with the forecasted warehouse capacity over the years 2024 -2030. The production and warehouse capacity were compared

Table 1. Forecasted production (paddy, red gram, maize) (LMT)

Year	ARIMA (1,1,0)
2024	179.35
2025	189.71
2026	193.16
2027	198.81
2028	203.75
2029	208.92
2030	214.02

(Source: calculated values by the researcher)

Table 2. Forecasted warehouse capacity (LMT)

Year	ARIMA (0,0,1)
2024	38.13
2025	38.53
2026	38.71
2027	38.79
2028	38.83
2029	38.84
2030	38.85

(Source: calculated values by the researcher)

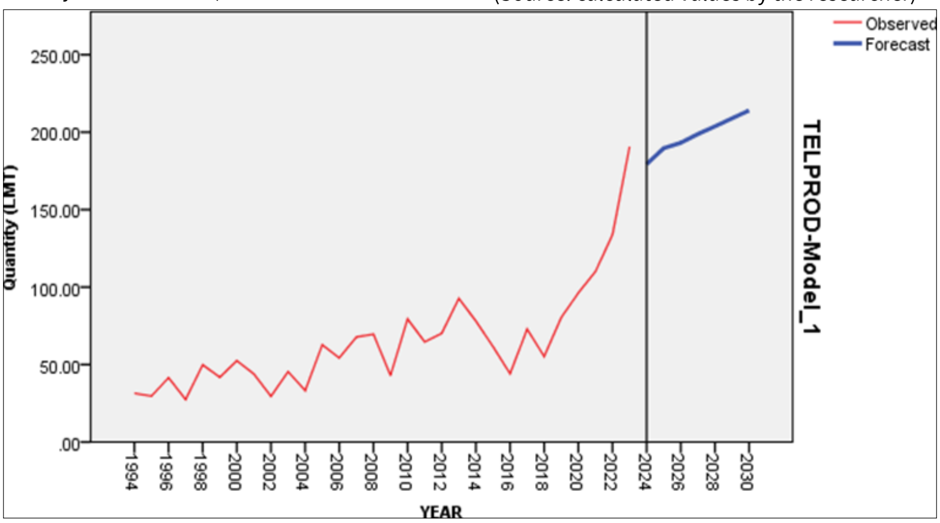

Fig. 6. Forecasted plot for production.

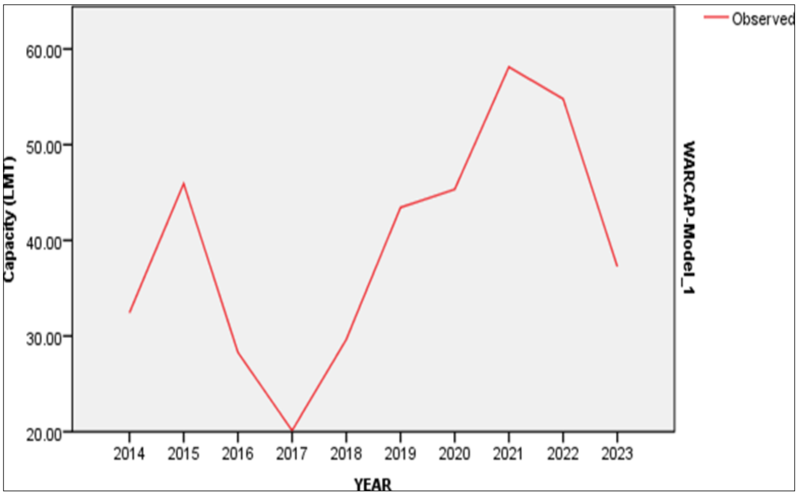

Fig. 7. Time series plot for warehouse capacity.

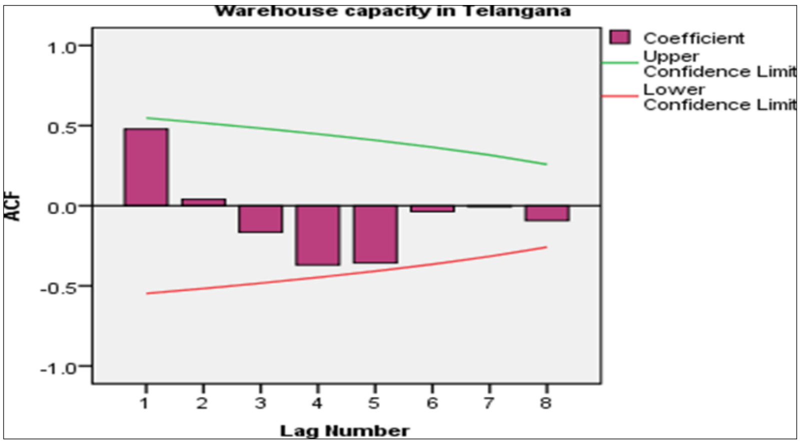

Fig. 8. ACF plot at stationarity.

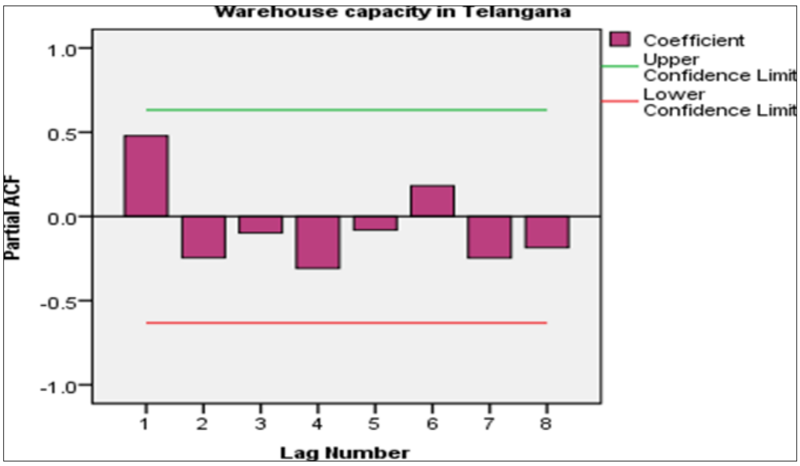

Fig. 9. PACF plot at stationarity.

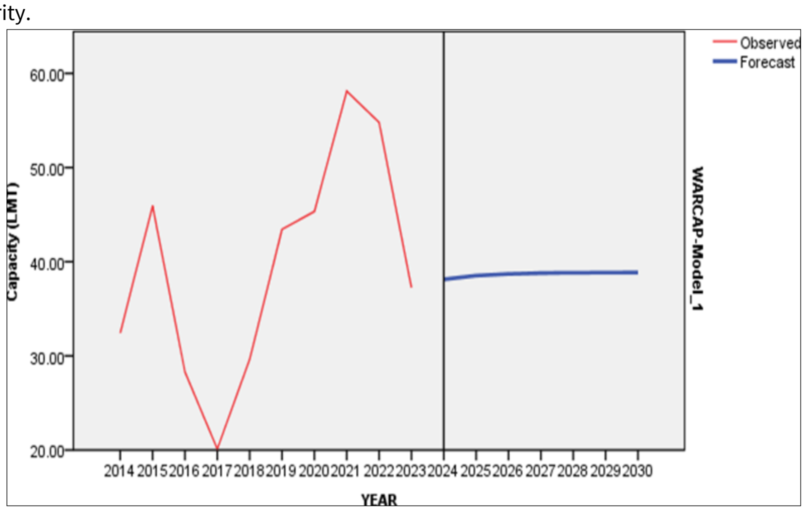

Fig. 10. Forecasted plot for warehouse capacity.

from the years 2014 to 2023 in Table 3.

Fig. 11. presents the comparison of production with warehouse capacity in Telangana.

The results from Table 4. shown that, between 2024 and 2030, agricultural production in Telangana is projected to rise significantly, reaching 214.02 LMT by 2030. However, warehouse capacity is expected to grow only slightly, from 38.13 LMT to 38.85 LMT, leading to a decline in the percentage of production that can be stored from 21.26 per cent to 18.15 per cent. This growing gap highlights the inadequacy of storage infrastructure. By 2030, to store just 20 to 35 per cent of the projected production, warehouse capacity would need to range from 42.80 LMT to 74.91 LMT, far exceeding current provisions.

The Fig. 12. presents the comparison of forecasted production with forecasted warehouse capacity.

The result from Table 5. reveals that, from 2024 to 2030, agricultural production in Telangana is projected to continue rising significantly, reaching 214.02 LMT by 2030. However, the capacity of warehouses is expected to increase only marginally, from 38.13 LMT in 2024 to 38.85 LMT in 2030. This disparity highlights a growing challenge in storage, as the percentage of production that can be accommodated by warehouses declines steadily from 21.26 per cent in 2024 to 18.15 per cent by 2030. The relatively stagnant growth in warehouse capacity, compared to the increasing production, indicates that Telangana's storage infrastructure is not keeping up with the demands of its expanding agricultural output.

It can be observed from Table 5. that the required storage capacity is less than the current total production of paddy, red gram and maize. Specifically, by 2030, to accommodate 20 per cent of the total production, a warehouse capacity of 42.80 LMT is needed. If 25 per cent of the production is to be stored, the capacity requirement increases to 53.51 LMT. For storing 30 per cent of the production, a capacity of 64.21 LMT is necessary and if 35 per cent of the production is to be stored, the required warehouse capacity rises to 74.91 LMT.

Table 5. Forecasting warehouse capacity using CAGR

Year	Forecasted warehouse capacity (LMT)
2024	50.76
2025	53.57
2026	56.54
2027	59.67
2028	62.97
2029	66.46
2030	70.14

(Source: calculated values by the researcher)

As ARIMA is not suitable for projecting warehouse capacity, which resulted in stationarity of warehouse capacity by 2030. Another tool CAGR is employed for projecting warehouse capacity from 2024 to 2030. The results were presented in Table 5.

The growth rate of warehouse capacity using CAGR technique is presented on Fig. 13. and forecasted warehouse capacity using CAGR is presented on Fig. 14.

The Compound Annual Growth rate (CAGR) of warehouse capacity in Telangana was reported at 2.7 per cent, but not significant. The forecasted warehouse capacity using CAGR shows an increasing trend with a maximum capacity of 70.14 LMT by 2030.

The increasing production coupled highlights the critical need for enhanced storage infrastructure in Telangana.

Without climate-controlled warehouses or hermetic storage systems, maize loses nutritional quality and market value due to aflatoxin growth (23), while red gram faces up to 15–20 % losses from bruchid beetles (24). Overflowing storage forces farmers to sell surplus produce immediately, leading to distress sales and increasing waste. This mismatch between production and storage infrastructure perpetuates a cycle of economic losses for

Table 3. Comparative analysis of production (paddy, red gram, maize) vis-à- vis with warehouse capacity in Telangana

Year	Production in Telangana (LMT)	Capacity of warehouses (LMT)	Per cent share in production
2014	78.06	32.43	41.54
2015	61.72	45.93	74.41
2016	44.12	28.30	64.14
2017	72.88	20.11	27.59
2018	55.21	29.64	53.68
2019	80.50	43.44	53.96
2020	96.25	45.33	47.09
2021	110.04	58.12	52.81
2022	133.90	54.79	40.91
2023	190.70	37.25	19.53
CAGR		2.70^{NS}	

(Source: calculated values by the researcher)

Table 4. Forecasted values of production and capacity of warehouses

Year	Production (LMT)	Capacity of warehouses (LMT)	Per cent share in production	20 % of Total production is stored	25 % of Total production is stored	30 % of Total production is stored	35 % of Total production is stored
2024	179.35	38.13	21.26	35.87	44.84	53.81	62.77
2025	189.71	38.53	20.30	37.94	47.43	56.91	66.40
2026	193.16	38.71	20.04	38.63	48.29	57.95	67.61
2027	198.81	38.79	19.51	39.76	49.70	59.64	69.59
2028	203.75	38.83	19.05	40.75	50.94	61.13	71.31
2029	208.92	38.84	18.59	41.78	52.23	62.68	73.12
2030	214.02	38.85	18.15	42.80	53.51	64.21	74.91

(Source: calculated values by the researcher)

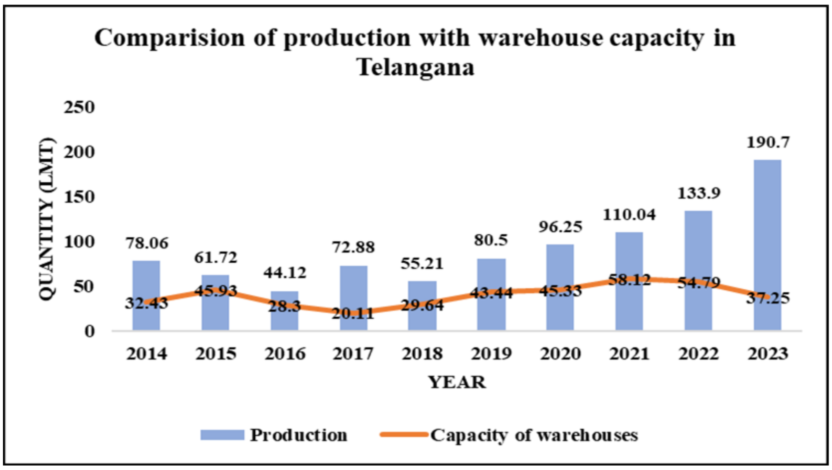

Fig. 11. Comparison of production with warehouse capacity.

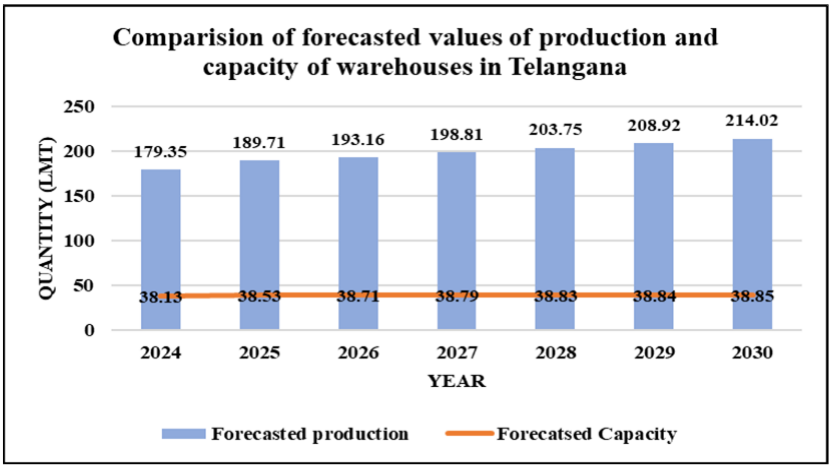

Fig. 12. Comparison of forecasted production with forecasted warehouse capacity.

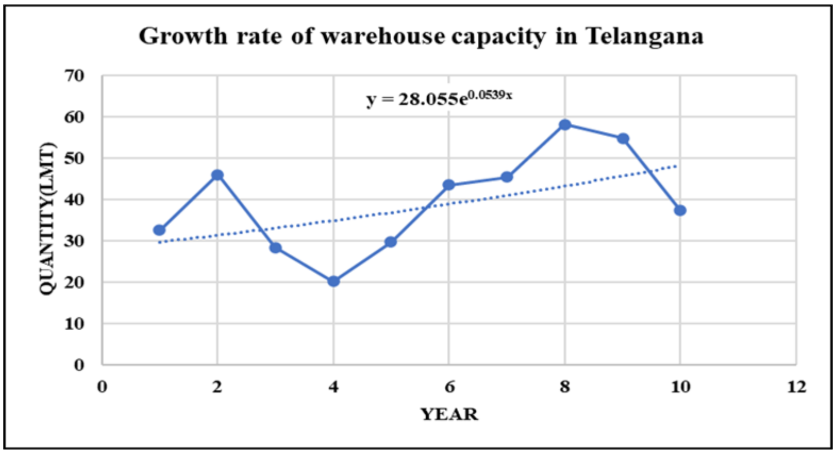

Fig. 13. Growth rate of warehouse capacity from 2014-2023 in Telangana using CAGR.

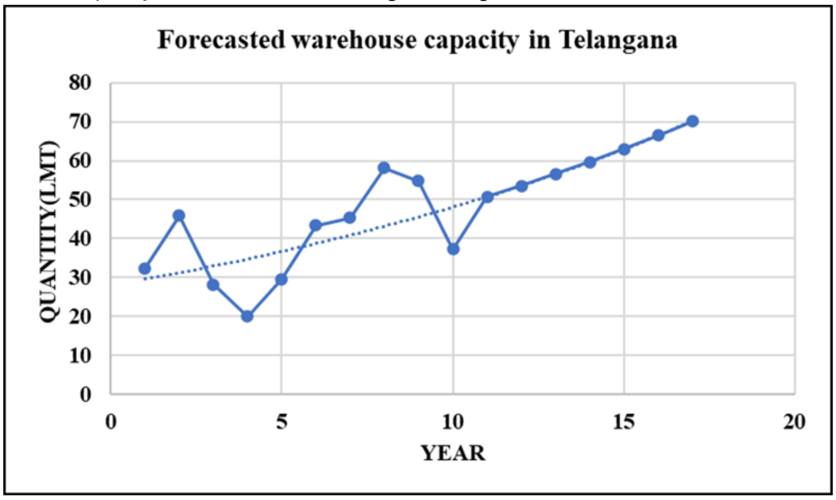

Fig. 14. Forecasting warehouse capacity from 2024-2030 in Telangana using CAGR.

farmers, food insecurity and avoidable greenhouse gas emissions from decaying organic matter.

Post-harvest losses can be reduced by reducing food wastage and improving storage infrastructure to allow inter-temporal arbitrage benefits due to price volatility of food grains (25). Reducing post-harvest losses is crucial for global food security, especially with population growth and environmental challenges. Innovative technologies help preserve nutrition, reduce waste and ensure more safe, nutritious food reaches consumers (26).

To reduce post-harvest losses, apply current knowledge to improve the handling systems (especially packaging) (27). Agro processing is a potent solution for curtailing post-harvest losses by employing various techniques like drying, canning and freezing which extends the shelf life of perishable crops, minimizing the risk of spoilage during storage (28).

Conclusion

From the present study, it is concluded that, even though the warehouse capacity is increasing year by year, it is not sufficient to accommodate the increasing production of major crops in Telangana. Without adequate storage, a substantial portion of the produce is at risk of spoilage, leading to economic losses for farmers and inefficiencies in the supply chain. Proper storage facilities are essential to ensure a steady supply of agricultural products to the market, stabilizing prices and availability throughout the year.

The government should increase budget allocations for warehouse construction to address the growing demand for enhanced storage capacity, ensuring that infrastructure development keeps pace with rising needs. Private construction of godowns should be encouraged, as warehouse investments are profitable from both the investors' and society's perspectives, enhancing storage infrastructure and supporting economic growth. Encourage farmers to cultivate a wide variety of crops and reduce their dependency on few crops such as paddy, red gram, maize by providing incentives for crop diversification. Future research may prioritize developing climate-resilient storage technologies tailored to Telangana's agro-climatic conditions to mitigate weather-induced post-harvest losses, research into socio-economic and institutional barriers to crop diversification also inform strategies to balance production patterns with storage demands.

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Authors' contributions

KD prepared the original draft, DRD performs the conceptualization and supervision. KS and AM supervised the whole work.

Compliance with ethical standards

Conflict of interest: The Authors do not have any conflict of interest to declare.

Ethical issues: None

References

1. Gustavsson J, Cederberg C, Sonesson U, Van Otterdijk R, Meybeck A. Global food losses and food waste. 2011.
2. Jha SN, Vishwakarma RK, Ahmad T, Rai A, Dixit AK. Report on assessment of quantitative harvest and post-harvest losses of major crops and commodities in India. All India Coordinated Research Project on Post-Harvest Technology, ICAR-CIPHET. 2015:130.
3. https://worldfoodindia.gov.in/2017/
4. National Bank for Agricultural and Rural Development. Annual Reports. https://www.nabard.org/nabard-annual-report
5. Parfitt J, Barthel M, Macnaughton S. Food waste within food supply chains: Quantification and potential for change to 2050. Philosophical transactions of the royal society B: Biological Sciences. 2010;365(1554):3065-81.
6. Olakiumide O. Post-harvest loss reduction: Enhancing food security and economic sustainability. Journal Siplieria Sciences. 2021;2(2):7-17.
7. https://ecostat.telangana.gov.in/
8. https://www.indiastat.com/
9. Food Corporation of India. Annual reports. https://fci.gov.in/headquarter/annualreport
10. Central Warehousing Corporation. Annual Reports. https://cewacor.nic.in /MasterStatic/annual_report
11. Rathod SA, Singh KN, Patil SG, Naik RH, Ray MR, Meena VS. Modeling and forecasting of oilseed production of India through artificial intelligence techniques. Indian J Agric Sci. 2018;88(1):22-7. https://doi.org/10.56093/ijas.v88i1.79546
12. Jamanal SK, Sadaqath SY. Compound growth rates of area under soybean crop in Dharwad, Karnataka, India. Agricultural Sciences Update. 2017;12:1891-94. https://doi.org/10.15740/HAS/AU/12.TECHSEAR(7)2017/1891-1894
13. Kumar BV, Janaiah A, Suhasini K, Seema, Meena A. Farmers' perception on agricultural development in Telangana state: some reflections from village survey.
14. Guntukula R, Goyari P. How does the yield variability in rainfed crops respond to climate variables? Evidence from pulses yields in Telangana, India. Journal of Agribusiness in Developing and Emerging Economies. 2022;12(2):262-80. https://doi.org/10.1108/JADEE-12-2020-0307
15. Singh RP. Productivity enhancement among cereal crops by mitigating climate change effect through deployment of climate resilient varieties in India: Evidence from the field. Climate Change and Environmental Sustainability. 2015;3:144. https://doi.org/10.5958/2320-642X.2015.00016.2
16. Chatterjee S. Storage infrastructure and agricultural yield: Evidence from a capital investment subsidy scheme. Economics. 2018;12(1):20180065. https://doi.org/10.5018/economics-ejournal.ja.2018-65
17. Hemavathi M, Prabakaran K. ARIMA model for forecasting of area, production and productivity of rice and its growth status in Thanjavur District of Tamil Nadu, India. Int J Curr Microbiol App Sci. 2018;7(2):149-56. https://doi.org/10.20546/

ijcmas.2018.702.019

18. Prabakaran K, Sivapragasam C, Jeevapriya C and Narmatha A. Forecasting cultivated areas and production of wheat in India using ARIMA model. Golden Research Thoughts. 2013;3(3):1-7. https://doi.org/10.9780/2231-5063/332013/2831
19. Patra C, Gupta AK, Kumar RR. Forecasting of area, production and yield of jute crop in India using ARIMA model. Int J Pharmacogn Phytochem. 2020;9(2):201-07.
20. Savadatti PM. Trend and forecasting analysis of area, production and productivity of total pulses in India. Indian Journal of Economics and Development. 2017;5(12):1-10.
21. Sujatha P and Sivasankari B. Forecasting area, production and productivity of rice in Tamil Nadu using time series model. International Journal of Statistics and Applied Mathematics. 2023;8(5):392-97.
22. Vishwajith KP, Sahu PK, Mishra P, Dhekale BS, Singh RB. Modelling and forecasting of arhar production in India. International Journal of Agricultural and Statistical Sciences. 2018;14(1):73-86. https://doi.org/10.9734/cjast/2019/v34i130118
23. Gautham K. Estimation of quantitative losses in stored black gram caused by pulse beetle (*Callosobruchus chinensis* linn.) and their management. M.Sc. (Ag.) Thesis, Institute of Agricultural Sciences, Banaras Hindu University, India. 2016.
24. Hell K, Cardwell KF, Setamou M, Poehling HM. The influence of storage practices on aflatoxin contamination in maize in four agroecological zones of Benin, West Africa. Journal of Stored Products Research. 2000;36(4):365-82. https://doi.org/10.1016/S0022-474X(99)00056-9
25. Chatterjee S. Storage infrastructure and agricultural yield: Evidence from a capital investment subsidy scheme. Economics. 2018;12(1):20180065. https://doi.org/10.5018/economics-ejournal.ja.2018-65
26. Zalpouri R, Kaur K, Kalsi BS, PP. Post-harvest solutions for food security: Reducing waste and preserving nutritional value in crop production. 2025;4:81-4. 10.5281/zenodo.14851599.
27. Kader AA. Increasing food availability by reducing postharvest losses of fresh produce. In International Postharvest Symposium 682. 2004:2169-76. https://doi.org/10.17660/ActaHortic.2005.682.296
28. Urugo MM, Yohannis E, Teka TA, Gemede HF, Tola YB, Forsido SF, et al. Addressing post-harvest losses through agro-processing for sustainable development in Ethiopia. Journal of Agriculture and Food Research. 2024:101316. https://doi.org/10.1016/j.jafr.2024.101316

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