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| **Slno** | **Title** | **Year** | **Methods Used** | **Contribution** | **Drawbacks** | **Relevance to Our Project** |
| 1 | *An Innovative Deep Learning Based Approach for Accurate Agricultural Crop Price Prediction* | 2022 | Deep Learning (Hybrid DL) | Accurate crop price prediction using advanced DL | Needs large datasets | Baseline deep learning reference for crop price |
| 2 | *Automated Agriculture Commodity Price Prediction System with Machine Learning Techniques* | 2021 | ML (RF, SVM, ANN) | Automated pipeline for crop price prediction | Limited interpretability | Validates ML approach for Agri prices |
| 3 | *Forecasting Commodity Prices Using Long Short-Term Memory Neural Networks* | 2020 | LSTM | Captures temporal crop price dependencies | Overfits on small datasets | Justifies LSTM use in our project |
| 4 | *A Framework for Crop Price Forecasting in Emerging Economies by Analyzing the Quality of Time-series Data* | 2020 | Time-series preprocessing, ARIMA | Focuses on data quality in forecasting | Classical models only | Informs us to preprocess clean datasets |
| 5 | *Temporal Fusion Transformers for Interpretable Multi-horizon Time Series Forecasting* | 2021 | TFT (Transformer) | SOTA multi-horizon forecasting | High complexity | Inspires use of Transformer for crop forecasting |
| 6 | *Quantum Temporal Fusion Transformer* | 2022 | Quantum TFT | Enhances TFT with quantum computing | Requires quantum hardware | Shows futuristic directions of forecasting |
| 7 | *An EnKF-LSTM Assimilation Algorithm for Crop Growth Model* | 2021 | EnKF + LSTM | Assimilates crop growth with LSTM | Data-heavy | Encourages combining growth + market data |
| 8 | *TAT: Temporal-Aligned Transformer for Multi-Horizon Peak Demand Forecasting* | 2022 | TAT (Transformer) | Aligns temporal patterns better than TFT | Complex training | Another advanced Transformer idea |
| 9 | *A Hybrid Machine Learning Framework for Optimizing Crop Selection via Agronomic and Economic Forecasting* | 2022 | Hybrid ML | Integrates agronomy + economics | No deep models | Inspires multi-factor decision making |
| 10 | *A Unified Hyperparameter Optimization Pipeline for Transformer-Based Time Series Forecasting Models* | 2023 | Transformers + HPO | Automatic hyperparameter optimization | Needs large compute | Guides us in tuning models for better accuracy |
| 11 | Spectral Temporal Graph Neural Network for Multivariate Time-series Forecasting | 2022 | Deep Learning (Hybrid DL) | Accurate crop price prediction using advanced DL | Needs large datasets | Baseline deep learning reference for crop price |
| 12 | Agriculture Commodity Arrival Prediction using Remote Sensing Data: Insights and Beyond | 2022 | Remote sensing + ML | Uses satellite-derived data to forecast commodity arrivals | Requires high-quality remote data | Helps link weather/crop yield data to prices |
| 13 | Predicting Agricultural Commodities Prices with Machine Learning: A Review of Current Research | 2021 | Literature Review (ML techniques) | Summarizes state-of-the-art methods | No experimental implementation | Provides broad understanding of existing work |
| 14 | MM-iTransformer: A Multimodal Approach to Economic Time Series Forecasting with Textual Data | 2023 | Multimodal Transformer | Combines textual and numerical features | Complex architecture | Shows potential of textual signals for prices |
| 15 | Time series forecasting of agricultural product prices based on recurrent neural networks and its evaluation method | 2020 | RNN | Demonstrates RNN for agri price forecasting | RNN may suffer vanishing gradient | Validates RNN feasibility for our data |
| 16 | Forecasting Agricultural Commodity Prices Using Dual Input Attention LSTM | 2023 | Attention-based LSTM | Uses attention over dual inputs for accuracy | Training cost is high | Improves sequence modeling for our goal |
| 17 | Enhancing agricultural commodity price forecasting with deep learning | 2022 | CNN + LSTM hybrid | Improves prediction accuracy | Requires big datasets | Reinforces deep learning value |
| 18 | Forecasting Prices of Agricultural Commodities using Machine Learning for Global Food Security: Towards Sustainable Development Goal 2 | 2021 | ML regression + ensemble | Focuses on food security implications | Generalized, lacks commodity-specific tuning | Links our work to SDG goals |
| 19 | A Study on Agricultural Commodity Price Prediction Model Based on Secondary Decomposition and Long Short-Term Memory Network | 2022 | Decomposition + LSTM | Improves prediction by trend decomposition | Complex preprocessing | Suggests decomposing price signals |
| 20 | Enhancing Agricultural Commodity Price Forecasting Using Generative Models: A Deep Learning Approach | 2023 | Generative DL (GANs/VAEs) | Synthesizes data to improve forecasting | Needs careful training | Helps when data is scarce |

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