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Abstract. This study examines whether international food price dynamics provide a reliable signal of undernourishment and human development outcomes relevant to the attainment of SDG 2 (Zero Hunger) by 2030. We apply wavelet coherence analysis to the FAO Food Price Index and the prevalence of undernourishment (SDG Indicator 2.1.1) over 2001–2023, testing statistical significance against an AR(1) red-noise null hypothesis. Hybrid ARIMA Random Forest models generate probabilistic price forecasts through 2030. These findings caution against mechanistic inferences from global price indices to hunger and human development outcomes, redirecting policy emphasis toward domestic transmission channels and nutrition-sensitive safety nets.

Keywords: food price volatility; undernourishment; SDG 2; wavelet coherence; food security; human development; scenario analysis; sustainable development