ABSTRACT

Artificial Neural Networks (ANNs) are non-linear mapping structures that are powerful tools for modelling, especially when the underlying data relationship is unknown. This work presents the design and evaluation of a neural network configuration for simulation and prediction of export and import of food for India. We first evaluate ANN configurations for synthetic data from a periodic (sine) process and a non-linear system (Duffing oscillator). The calibrated ANN configuration is then employed to simulate and predict observed data on annual export and import of food for India. The results show that the adopted configuration is quite successful in simulating the variability in the export and import data.