

## ABSTRAK

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Program Studi : Teknik Informatika  
Judul Laporan Skripsi : Peramalan Harga Pasar Telor Ayam Ras di Provinsi Banten menggunakan Bentuk *Auto ARIMA (Auto Regression Integrated Moving Average)*  
Pembimbing : Leonard Goeirmanto, Dr., ST, M.Sc.

Telur ialah bagian dari sumber protein hewani yang cukup disukai oleh banyak masyarakat, Satu diantara faktor yang mendorong masyarakat guna menyukai telur ayam ras adalah harganya yang murah. Harga telur ras di pasar bervariasi. (Miyahil Uyun & Soebroto, 2018). Ada potensi kenaikan dan penurunan. Kondisi ini hendak berdampak pada permintaan telur ayam ras secara keseluruhan. Semakin tinggi harga telur ayam ras, semakin sedikit yang diinginkan masyarakat guna telur ayam ras. (Miyahil Uyun & Soebroto, 2018). Mungkin masyarakat hendak beralih ke produk lain, seperti tahu atau tempe. Dibutuhkan sistem yang mampu meramalkan harga pasar telur ayam ras, karena peternak mengalami kerugian. Ini terutama berlaku di provinsi Banten. Metode *Auto Regressive Integrated Moving Average (ARIMA)* adalah Salah satu bentuk prediksi deret waktu yang dikemukakan oleh Box dan Jenkins di tahun 1970an adalah *Auto Regressive Integrated Moving Average (ARIMA)* yang mana *ARIMA* mengintegrasikan dari metode *Moving Average (MA)* dan *Auto Regressive (AR)*. Metode ini bisa dipakai untuk prediksi jangka pendek dan meramalkan data berskala besar. bentuk terbaik yakni (2,0,3) dengan komparasi data training serta testing sebesar 99:1%. Dengan memakai data training yang lebih banyak maka hendak semakin efektif. Bentuk prediksi harga pasar telur ayam di Provinsi Banten pada 1 January 2022 hingga 31 December 2022 yakni (2,0,3) dengan prediksi nominal harga pada hari ke- 360 sampai 364.

**Kata Kunci:** Peramalan, *Auto Regressive Integrated Moving Average*, Harga Telur, Banten, *ARIMA*.

## ABSTRACT

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Title Thesis : Forecasting the Market Price of Race  
Chicken Eggs in Banten Province using the  
Auto ARIMA (Auto Regression Integrated  
Moving Average) Model  
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Eggs are part of the source of animal protein which is quite liked by many people. One of the factors that encourages people to like broiler chicken eggs is the cheap price. The price of race eggs on the market varies. (Miyahil Uyun & Soebroto, 2018). There is potential for ups and downs. This condition will have an impact on the demand for broiler chicken eggs as a whole. The higher the price of broiler chicken eggs, the less people want to use broiler chicken eggs. (Miyahil Uyun & Soebroto, 2018). Maybe people want to switch to other products, such as tofu or tempeh. A system is needed that is able to predict the market price of broiler eggs, because farmers suffer losses. This is especially true in Banten province. The Auto Regressive Integrated Moving Average (ARIMA) method is a form of time series prediction put forward by Box and Jenkins in the 1970s, namely the Auto Regressive Integrated Moving Average (ARIMA), where ARIMA integrates the Moving Average (MA) and Auto Regressive (AR) methods. This method can be used for short-term predictions and forecasting large-scale data. the best form is (2,0,3) with a comparison of training and testing data of 99:1%. By using more training data, it will be more effective. The prediction form for the market price of chicken eggs in Banten Province from 1 January 2022 to 31 December 2022 is (2,0,3) with nominal price predictions on days 360 to 364.

**Keywords:** Forecasting, Auto Regressive Integrated Moving Average, Egg Prices, Banten, ARIMA.