AN ANALYSIS OF EGG PRODUCTION AND PRICES IN BATTICALOA DISTRICT AND SRI LANKA

BY

JEYAGOPAL NIMALANATHAN





FACULTY OF AGRICULTURE

EASTERN UNIVERSITY

SRI LANKA

2009

PROCESSED Main Library, EUSI

ABSTRACT

Eggs play an important role in the daily diet of Sri Lankan households as a cheap protein source. Egg production in Sri Lanka has been a backyard activity in rural households for along time and in resent years commercial egg production has emerged as a major activity in the livestock sector. The per capita egg consumption in Sri Lanka is around53 eggs /person /year. This is primarily dependent on supply and prices of eggs, which will determine the future levels of production and consumption.

This study reveals the trends in egg production and prices in Sri Lanka and Batticaloa District for a twenty years period (1987-2007). It also reveals the retailers marketing margins for the above period to understand the profits to retailers, and made an attempt to predict the future levels of egg production using a fitted model. Secondary data was mainly used for the study, which were taken from the publication of the Dept. of Census and Statistics, Central Bank Reports and Dept. of Animal Production & Health.

There was an increasing trend in egg production up to 2004, both in Batticaloa and Sri Lanka; but later Batticaloa experienced a sharp fall in egg production, partly due to the impact of displacement after the 'Tsunami' in 2004.' Producer prices for eggs in Batticaloa showed an increasing trend and higher compared to that elsewhere in Sri Lanka. But in contrast, the retail price of eggs, although showed an increasing trend, was almost similar in Batticaloa and Sri Lanka for the period investigated.

I

The marketing margin for eggs also showed an increasing trend both Batticaloa and Sri Lanka; which reflected the increasing level of profits expected by retailers. This has an impact on egg consumption at the household level, thereby having an indirect effect on egg supply in Sri Lanka. Various models (linear, quadratic, cubic and compound growth) were fitted to the egg production data for Batticaloa and Sri Lanka.

Based on the model R squared values, it was found that only the cubic and quadratic models best fitted the data for Batticaloa and Sri Lanka respectively. The fitted models were used to predict the level of egg production for the next two years, and results showed that egg production will decline both Batticaloa and Sri Lanka.

Declining egg production will have a significant impact on egg consumption in Batticaloa and Sri Lanka; which expected to raise the price of eggs too. Hence government should take immediate actions, particularly in Batticaloa district, to increase egg production through appropriate measures such as provision of credit better veterinary services and subsidized feeds.

TABLE OF CONTENTS

CONTENTS	PAGE NO				
ABSTRACT	Ι				
ACKNOWLEDGEMENT					
TABLE OF CONTENTS					
LIST OF TABLE					
LIST OF FIGURE					
ABBREVIATION					
.*					
CHAPTER – 01 Introduction					
1.1 background	01				
1.2 Rationale of the Study	03				
1.3 Objectives of the Study	04				
1.4 Limitation of the Study	05				
CHAPTER – 02 Literature Review					
2.1 Nutritional Importance and Consumption of Eggs	06				
2.2 Poultry Industry	07				
2.3 Egg Production in Sri Lanka	09				
2.4 Egg Production in Batticaloa District	09				
2.5 Egg Marketing	10 *				
2.5.1 Different Type of Egg Marketing	11				
2.5.1.1 Sales from the Farm	11				

			2.5.1.2 Door-to-Door Sales	11	
			2.5.1.3 Producers' Markets	12	
			2.5.1.4 Sales to local Retail Shops	12	
		2.5.2	Demand and Supply of Eggs	13	
ъ	2.6	Egg Mar	keting Channel	14	
	2.7	Pricing o	of the Eggs	15	
	2.8	3 Seasonal Variation and Cyclical Movement of Eggs			
	2.9	Layer Pr	oduction System	17	
	2.10) Government Policies			
		2.10.1	Animal Quarantine and Inspection Services	19	
		2.10.2	Price Maintenance of Essential	19	
			This "" Diversity of the gap because in		
CHAPTER – 03 Methodology					
	3.1	Description of Study Area			
	,	3.1.1	Common Features	22	
		3.1.2	Physical Features	23	
		3.1.3	Climate and Rainfall	23	
		3.1.4	The Lagoon	23	
	3.2	Data Collection			
	3.3	Analytical Procedure			
	3.4	Analytical Frame Work			
		3.4.1	Growth Rate	25	
		3.4.2	Marketing Margin Analysis	26	
		3.4.3	Curve Fitting for Data and Forecasting	27	

CHAPT	TER – 04 Result and Discussion	28
4.1	Comparisons of Egg production and Egg Prices in Batticaloa District and Sri Lanka	28
4.2	Egg Production trends	29
4.3	Trend in Retail Price of Egg	31
4.4	Trend in Producer Prices of Egg	33
4.5	Marketing Margin for Egg	35
4.6	Compound Growth Rate in Egg Production and Prices	36
4.7	Curve Fitting for Egg Production	37
	4.7.1 Quadratic Model Curve Fitting for Egg Production in Sri Lanka	37
	4.7.2 Cubic Model Curve Fitting for Egg Production in Batticaloa District	39
СНАР	TER – 05 Summary and conclusion	41
REFER	ENCE	44
Append	ix ·	50

States of the states