# ANALYSIS OF DEMAND AND SUPPLY ON CAPSICUM ANNUUM IN PERLIS USING GEOGRAPHIC INFORMATION SYSTEM APPLICATION

NUR IZZATI INANI BINTI NORZAIMI

2019805149



COLLEGE OF BUILT ENVIRONMENT UNIVERSITI TEKNOLOGI MARA PERLIS

AUGUST 2023

## ANALYSIS OF DEMAND AND SUPPLY ON CAPSICUM ANNUUM IN PERLIS USING GEOGRAPHIC INFORMATION SYSTEM APPLICATION

### NUR IZZATI INANI BINTI NORZAIMI 2019805194



Thesis submitted to the Universiti Teknologi MARA Malaysia in partial fulfillment for the award of the degree of the Bachelor of Surveying Science and Geomatics (Honours)

**AUGUST 2023** 

**AUTHOR'S DECLARATION** 

I declare that the work in this thesis was carried out in accordance with the regulations of

Universiti Teknologi MARA. It is original and is the results of my own work, unless

otherwise indicated or acknowledged as referenced work. This thesis has not been

submitted to any other academic institution or non-academic institution for any degree or

qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and

Regulations for Under - Graduate, Universiti Teknologi MARA, regulating the conduct

of my study and research.

Name of Student

Nur Izzati Inani binti Norzaimi

Student I.D. No.

2019805194

Programme

Bachelors in Surveying Science and Geomatics -

AP220

Faculty

College of Built Environment, CBE

Thesis Title

Analysis of Demand and Supply on Capsicum Annuum

in Perlis Using Geographic Information System

Application

Signature of Student

:

Date

18 July 2023

iii

#### **ABSTRACT**

Capsicum Annuum, commonly known as chili pepper or capsicum, is a plant species that produces various types of peppers, including both sweet and hot varieties. In Malaysia, Capsicum Annuum specifically refers to red chili peppers. Due to its spiciness and flavour, Capsicum Annuum is highly sought after in Malaysian cuisine. However, the local supply of Capsicum Annuum falls short of meeting the strong demand. To address this disparity between supply and demand, the study focuses on the northern region of Peninsular Malaysia, namely Perlis. This study aims to utilize Geographic Information System (GIS) for conducting a spatial analysis of Capsicum Annuum distribution in Perlis. To achieve this aim, the objectives of the study are to analyze the demand and supply of Capsicum Annuum in Perlis using a GIS application and to create a spatial relationship between the demand and supply of Capsicum Annuum among the local community and supplier. The hypothesis posits that when demand surpasses supply, it leads to higher local market prices. By leveraging Geographic Information System (GIS), this research aims to enhance income and employment opportunities by raising awareness about the existing supply shortage and encouraging young individuals to participate in the expansion of Capsicum Annuum distribution, thus reducing dependency on imports.

#### TABLE OF CONTENTS

CHAPTER	TITLE CONFIRMATION BY PANEL OF EXAMINERS AUTHOR'S DECLARATION ABSTRACT ACKNOWLEDGEMENT TABLE OF CONTENTS LIST OF TABLES LIST OF FIGURES			PAGE ii iii iv v vi ix					
					LIST OF ABBREVIATIONS			xii	
					1	INTRODUCTION			1
						1.1	Resea	1	
						1.2	Proble	3	
						1.3	Research Background		5
						1.4	Aim of the study		5
						1.5	Research Question		5
	1.6	Signif	6						
1.12	Signif	6							
	1.6.1	Price Stability and Affordability.	6						
		1.6.2	Improved Local Production.	6					
		1.6.3	Economic Growth and Employment	7					
			Opportunities.						
	1.7	Thesis	s Outline	7					
2	LITERATURE REVIEW			8					
	2.1	Introd	8						
	2.2	Litera	8						
		2.2.1	Capsicum Annum	8					
		2.2.2	Land used	9					