

**COCOA PRODUCTION TRENDS IN SOUTH-WEST, NIGERIA,  
1950-2010**

**By**

**BINEY, KAYODE ADEYEMI**

**A THESIS SUBMITTED TO THE SCHOOL OF POST GRADUATE  
STUDIES, UNIVERSITY OF LAGOS, AKOKA, LAGOS, IN PARTIAL  
FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF  
DOCTOR OF PHILOSOPHY (Ph.D) IN GEOGRAPHY**

**OCTOBER, 2017**

# **DEDICATION**

To Almighty God

## ACKNOWLEDGEMENT

This work is a product of divine grace and not my personal effort. It was nearly a mission impossible but for the timely showers of providence that watered it with refreshing time, resources, facilities and the enthusiastic support received at crucial periods of the work from men and women.

I wish to express my sincere, heart-felt appreciation and gratitude to my supervisors, Prof. A.S.O Soneye, a thorough academic, a diligent teacher for his wonderful role of encouragement from the beginning to the completion of this work. I also appreciate Dr. Feyisetan Oni, an erudite scholar and a gentleman for his mentoring and the patience with which he went through the work. My appreciation goes to the Dean of Social Sciences, Prof. Iyiola Oni for his interest in making sure that I accomplish this feat despite all odds. I thank all the academic staff of the Department of Geography for their assistance, constructive and valuable suggestions, and encouragement during the execution of this study. In this regard, I am particularly grateful to Dr. Amidu Ayeni, Dr. Fasona, Dr. Odunuga, Dr. Adeaga, Dr. I. I. Balogun and Dr. Elias for their constructive comments and observations during the seminars on this study.

I am also grateful to the non-academic staff of the Department of Geography; in particular all staff in the H.O.D's office especially Mrs. Kazeem, for their assistance and encouragement in many ways. To my able H.O.D, Prof. 'Demola Omojola, I say thank you for useful suggestions and assistance. I wish to state my eternal gratitude to Mr. Ayodele Maja and Mr. Wellington Majora for giving me a big break in terms of secured future. I wish to specially appreciate Mr. Seyi and Mrs Funmi who assisted me with data collection and collation. My

appreciation will not be complete if I don't mention Mr. Moruf. Gratefully appreciated are my numerous friends, associates and colleagues among who are Dr. Dokun Adekanye, Mr. Sunmola Bakare, Gen. Benjamin Ipinyomi, Mr. Wale Bakare, Ex-Boys of Nigerian Military School, Zaria (76-81 set). I say thank you and God bless you all in quantum.

I wish to equally appreciate Mrs. Ojo, Miss Titi Akinbode and Miss. EbunOlorun Afolabi for their assistance in typing the work.

I wish to express my profound and eternal gratitude to members of my family. To my parents, Mr. K.A. and Mrs. F.A. Biney, for their prayers and encouragement to complete this study; I say a big thank you. To my children, Mrs. Felicia Omolara Balogun, Adeyemi Adekunle Biney and Omobalanle Adeyemi Biney who have been very understanding in their own way. I say may you usefully live long, prosper and surpass your parents in all ramifications. To my sibling, General Enitan Ransome-Kuti and family, Mr. Tunde Faderin and family, Mr. Kola Biney, Mr. Seun Biney and Mrs. Folashade Ekpu; I say thank you for all we have been to one another. I appreciate my wife, Mrs. D.S. Biney, a jewel of inestimable value, for her unalloyed love and believe in me as well as her prayers and support.

Finally, to my son-in-law, Mr. Tola Balogun and my cousin, Mr. Segun Ola, I say thanks for your good wishes.

**AUTHOR'S STATEMENT**

I hereby agree to give the University of Lagos through University of Lagos Library, a non-exclusive, worldwide right to reproduce and distribute my thesis and abstract (hereinafter "the work") in whole or in part, by any and all media of distribution, in its present form or style or in any form or style as it may be translated for the purpose of future preservation and accessibility provided that such translation does not change its content.

By the grant of non-exclusive rights to University of Lagos through the Library under this agreement, I understand that the rights of the University of Lagos are royalty free and that I am free to publish the work in its present version or future versions elsewhere.

**Warranties**

I further agree as follows:

- i. That I am the author of the Work and I hereby give the University of Lagos the right to make available the Work in the way described above after a three (3) year period of the award of my decorate degree in compliance with the regulation established by the University of Lagos Senate.
- ii. That the Work does not contain confidential information which should not be divulged to any third party without consent.
- iii. That I have exercised reasonable care to ensure that the Work is original and it does not to the best of my knowledge breach any Nigerian law or infringe any third party's copyright or other Intellectual Property Right.
- iv. That to the extent that the Work contains material for which I do not hold copyright, I represent that I have obtained the unrestricted permission of the copyright holder to grant this license to the University of Lagos Library and that such third party material is clearly identified and acknowledge in the Work.
- v. In the event of a subsequent dispute over the copyrights to material contained in the Work, I agree to indemnify and hold harmless the University of Lagos and all of its officers, employees and agents for any uses of the material authorized by this agreement.
- vi. That the University of Lagos has no obligation whatsoever to take legal action on my behalf as the Depositor, in the event of breach of intellectual property rights, or any other right, in the material deposited.

BINEY K.A                       7/2/18                      binneyk@unilag.edu.ng  
Author's Name                      Signature/Date                      Email

 (Prof. Sanyal A.S.O.)                                            asoneye@unilag.edu.ng  
Supervisor's Name                      Signature/Date                      Email

OWI, F.O.                                            fo@unilag.edu.ng  
Supervisor's Name                      Signature/Date                      Email

SCHOOL OF POSTGRADUATE STUDIES  
UNIVERSITY OF LAGOS

*CERTIFICATION*

This is to certify that the Thesis:


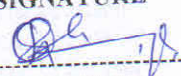
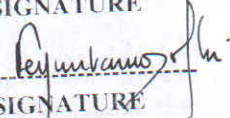


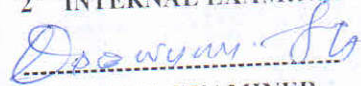


COCOA PRODUCTION TRENDS IN SOUTH-WEST, NIGERIA, 1950-  
2010

Submitted to the  
School of Postgraduate Studies  
University of Lagos

For the award of the degree of  
**DOCTOR OF PHILOSOPHY (Ph.D.)**  
is a record of original research carried out

By:

**BINEY Kayode Adeyemi**  
In the Department of Geography

<u>BINEY KAYODE ADEYEMI</u>	<u></u>	<u>7/2/18</u>
AUTHOR'S NAME	SIGNATURE	DATE
<u>Prof. Alabi Soneye</u>	<u></u>	<u>07/02/18</u>
1 <sup>ST</sup> SUPERVISOR'S NAME	SIGNATURE	DATE
<u>Peyi Osi</u>	<u></u>	<u>07/02/2018</u>
2 <sup>ND</sup> SUPERVISOR'S NAME	SIGNATURE	DATE
<u>Imoisa Oni</u>	<u></u>	<u>07/02/18</u>
1 <sup>ST</sup> INTERNAL EXAMINER	SIGNATURE	DATE
<u>Idowu Babagun</u>	<u></u>	<u>7-02-2018</u>
2 <sup>ND</sup> INTERNAL EXAMINER	SIGNATURE	DATE
<u></u>	<u></u>	<u>7/2/18</u>
EXTERNAL EXAMINER	SIGNATURE	DATE
<u>Obi Imtantu</u>	<u></u>	<u>07-02-18</u>
SPGS REPRESENTATIVE	SIGNATURE	DATE

## TABLE OF CONTENTS

Title Page	i
Dedication	ii
Acknowledgement	iii
Certification	v
Table of contents	vi
List of tables	x
List of figures	xii
List of plates	xiii
Abstract	xiii

### CHAPTER ONE

<b>1.0 INTRODUCTION</b>	<b>1</b>
1.1 Background to the Study	1
1.2 Statement of Problem	3
1.3 Aim and Objectives of Study	5
1.4. Research Questions	6
1.5 Scope and Delimitation of Study	7
1.6 Research Questions	7
1.7 Research Hypotheses	8
1.8 Rationale/Justification of Study	8
1.9 Operational Definition of Terms	9

1.9.1	The Study Area	10
1.9.2	The Cocoa Belt of South-West Nigeria.	13
1.9.3	The Physical Setting	14
1.9.4.	The Socio-Economic/Cultural Setting	17

## **CHAPTER TWO**

<b>2.0</b>	<b>LITERATURE REVIEW</b>	<b>18</b>
2.1	Cocoa and its Origin	18
2.1.1	Economic Uses of Cocoa	18
2.2	Global history of Cocoa Production	20
2.2.1	Global Production of Cocoa	23
2.2.2	Spread of cocoa production to Africa	42
2.2.3	Cocoa production trends in individual countries	44
2.2.4	Cocoa Production Trend in Ghana	45
2.2.5	Cocoa Production Trend in Cote D’voire	45
2.2.6	Cocoa Production Trend in Brazil	46
2.2.7	Cocoa Production Trend in Malaysia	47
2.2.8	Cocoa Production Trend in Indonesia	47
2.2.9	Cocoa Production Trend in Nigeria	48
2.3	Theoretical /Conceptual Framework -	50

## **CHAPTER THREE**

<b>3.0</b>	<b>THE RESEARCH METHODOLOGY</b>	<b>54</b>
3.1.0	Population and Sample Frame of the Study Area	54



3.1.1	Sample Size	54
3.1.2	Sampling Technique	54
3.1.3	Data Sources	55
3.2.	Data Analysis	59
3.2.1	Trend Analysis	59
3.2.2	Independent Sample T Test	60
3.2.3	Regression Analysis	61
3.2.4	Factor Analysis	62
3.2.5	Factor Loadings	63
3.2.6	Eigenvalues:/Characteristic Roots	63
3.2.7	Extraction Sums of Squared Loadings	63
3.2.8	Factors Scores	64
3.2.9	Kaiser Criterion	64
3.3	Research Design:	65
3.3.1	Reliability of the Instrument	65
3.3.2	Validity	65
3.3.3	Data Requirements	66

## **CHAPTER FOUR**

<b>4.0</b>	<b>ANALYSIS AND RESULTS</b>	<b>67</b>
<b>4.1</b>	<b>Trends in Production Volume Between 1950 And 2010</b>	<b>67</b>
	Test of Hypothesis 1	68
4.1.1.	Perception of Respondent Farmers	73
4.1.2	Cultivated Hectares in the States.	75

4.1.3	Cocoa Yield in the States of Study	76
4.2	Factors Affecting Crop Production	78
	Test of Hypothesis 2	81
4.3	Socio-Economic Characteristics of the Farmers	84
	Test of Hypothesis 3	86
4.4	Impacts of Policies, Institutions and Incentives by Stakeholder Groups and Associations.	87
4.4.1	Agricultural Sector Development Programmes	91
4.4.2	The Roles and Performance of Agriculture Policies.	92
4.4.3	Monetary, Credit and Financial Policies towards Agriculture.	99
4.4.4	National Cocoa Policy	103

## **CHAPTER FIVE**

<b>5.0</b>	<b>SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS</b>	<b>104</b>
5.1.	Summary of Findings	104
5.2.	Conclusion	107
5.3.	Recommendations	107
5.4	Contribution to Knowledge	109
	References	111
	Appendix	

## LIST OF TABLES

1.	The Global Production of cocoa, 1974- 2004	24
2.	Cocoa Production by Countries for 2008- 2009 and 2012-2013 seasons	25
3.	Decadal (10-year) moving Average of Cocoa Production since 1895 in Nigeria	49
4.	Sampling locations of Cocoa	57
5.	Result of T-test Analysis on Cocoa Production Volume in the Study Area.	68
6.	Production of Cocoa (in tons) in the Western States of Nigeria 1966/67-1975-76	71
7.	Monetary Value of Nigerian Cocoa Beans (N million) 1960-2004	72
8.	Growth of Nigerian Cocoa Beans Production and Export 1900-2004 (metric tons)	72
9.	Size of Cocoa Farms Cultivated in 2010 per farmer in each of the states Studied	76
10.	Average Cocoa Beans Yield in the States Studied, 1991- 2010	77
11.	Estimated Ages of the Cocoa Trees in the Study Areas	77
12.	Cumulative ranking of Challenges Across Study Areas	80
13.	Total Variance Table	82
14.	Results of the Factor Analysis on Challenges of Cocoa Production	83
15.	Factor Analysis for Significant Challenges to Cocoa Farming during 1950-1970, 1971-1990 and 1991-2010.	84
16.	Regression Analysis of Respondents Socio-Economic Variables	87

## LIST OF FIGURES

### FIGURES

1.	The study area	11
2.	The study area showing the cocoa belt and other agricultural landmarks	12
3.	Sampled cocoa-producing communities in the Study	58
4.	Volume of cocoa production in Nigeria (1960- 2009)	68
5.	Comparative cocoa exports (tons) from Nigeria to World in figures between 1960-1974	70
6.	Farmers' perception on the trend of cocoa production in the study area	74
7.	Summary of farmers' perception of periodic cocoa production within the study area	75
8.	Challenges to cocoa farming in the studied states	79
9.	The Social Economic Variables of the Sampled Farmers.	85

## LIST OF PLATES

### PLATES

1:	Cocoa Farm	14
2:	Cocoa Pods on Cocoa Trees	40
3:	Sun drying of Cocoa beans	41
4:	Weighing of cocoa beans in jute bags in Amu market, Ijebu North LGA, Ogun state	42

## ABSTRACT

Cocoa crop production as an aspect of agriculture propelled significant socio-economic development in South-West Nigeria in the first half of the 20th century. It precipitated robust economic growth in Nigeria between the 1950s and 1960s. This thesis addresses the research needs for a spatio-temporal analysis of the trends in *cocoa* production in south-west Nigeria in the pre and post-oil boom eras. It examines the socio-economic impact of cocoa production on the well-being of the farming communities, revenue generation for the producing states and Nigeria's capital formation. This was carried out with a view to understanding the spatio-temporal changes that shaped *cocoa* production volume in the study periods, particularly since the 1970s and especially since the 1980s. The study further examined how various agricultural policies affected the sustainability of the Nigerian cocoa industry, particularly in the post-oil boom era. Data on *cocoa* production and the socio-economic variables of the farmers and farming communities were obtained through structured questionnaires and focus group discussions. Information was equally obtained from the annual abstract of statistics and periodic bulletins of the Central Bank of Nigeria (CBN) amongst others. The data were processed using the Statistical Package for the Social Sciences (SPSS). The specific analytical procedures employed include Trend analysis, descriptive statistics, independent t-test, factor analysis and regression analysis. The findings show that, although, cocoa production reached its peak in the pre-oil boom era (1950- 1970), the revenue from *cocoa* production was relatively insignificant when compared with the revenue from crude oil production since the 1970s. However, increasing urbanization and prospects for less excruciating white collar jobs and city life has led to rural-urban migration of *cocoa* farmers from the cocoa belt of South-West Nigeria. This has negatively impacted production and has constituted serious challenge for the growth of Nigeria's cocoa industry as well as the socio-economic wellbeing of rural agrarian communities in the region. Also, lack of adequate financing has negatively affected the provision of basic inputs such as cocoa seedlings and fertilizers amongst others. Access to loans, cocoa storage facilities and the old age of trees are problems which have also negatively impacted on revenue and have concomitantly affected the provision of social amenities with dire consequences for the livelihoods of the farming communities. Furthermore, the failure of numerous policies designed to revive cocoa production further impacted negatively on productivity.

**Keywords:** Cocoa Production, Oil Boom, Socio-economic, South-West, Spatio-temporal.