

APPLICATION OF GEOGRAPHIC INFORMATION SYSTEMS IN AGRICULTURAL LAND SUITABILITY ANALYSIS

BY

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DEGREE IN GEOGRAPHY

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Application of Geographic Information Systems in Agricultural Land Suitability Analysis" was carried out by [STUDENT'S FULL NAME], and has been read and approved as meeting the regulations governing the award of the degree of Bachelor of Science (B.Sc.) of the University of Lagos.

PROJECT SUPERVISOR

Date

HEAD OF DEPARTMENT

Date

EXTERNAL EXAMINER

Date

DEDICATION

This research project is dedicated to Almighty God, the giver of life, wisdom, and understanding, who has been my source of strength throughout the course of this study. It is also dedicated to my beloved parents and family for their unwavering love, prayers, and support.

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ABSTRACT

This study examined application of geographic information systems in agricultural land suitability analysis, using undergraduate students of the University of Lagos as a case study. The study was guided by three specific objectives: to examine the extent to which respondents exhibit the key attributes of application; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with application and geographic. The study adopted a descriptive survey research design, anchored on the Systems Theory and the Sustainable Development Theory. A sample size of 410 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 386 questionnaires were found valid for analysis. Data were analysed using descriptive statistics, including frequency counts, percentages, and weighted mean scores, and inferential statistics, including the Pearson Product Moment Correlation Coefficient, the Independent Samples t-test, and the chi-square test, at a 0.05 level of significance. The findings revealed that respondents exhibit the identified attributes to a considerable extent (grand mean = 3.03). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.467$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.56, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.11$, $p > 0.05$). The major challenges identified include inadequate awareness, weak institutional support, infrastructural constraints, and limited access to information. The study recommends targeted interventions, improved access to resources, and intensified public education on application.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of application of geographic information systems in agricultural land suitability analysis is situated within a body of scholarship that has grown rapidly in the past two decades. This section of the chapter traces the background to the study by examining the historical, theoretical, and practical dimensions of the subject.

In both global and African literatures, application is now regarded as a key index of institutional performance. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream application into routine governance. Studies conducted within the West African subregion by Nwosu and Adeniyi (2018) reached conclusions broadly consistent with the Nigerian evidence. Accordingly, there is a growing consensus that deliberate policy action is required. Studies conducted within the West African subregion by Adigun and Bello (2018) reached conclusions broadly consistent with the Nigerian evidence. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

A growing corpus of literature draws attention to the pivotal role of application in shaping developmental trajectories. Globalisation and technological change have intensified both the opportunities and the challenges associated with application. Comparative work by Dauda and Bakare (2022) across several states uncovered a consistent pattern linking application with geographic. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. A notable study by Obiora and Olawale (2017) argued that the impact of application is substantially mediated by the quality of institutions. Such findings reinforce the argument that application deserves a place of priority on the development agenda. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

A growing corpus of literature draws attention to the pivotal role of application in shaping developmental trajectories. Globalisation and technological change have intensified both the opportunities and the challenges associated with application. Comparative work by Obiora and Olawale (2022) across several states uncovered a consistent pattern linking application with geographic. These observations collectively invite a reconsideration of standard assumptions regarding geographic. Longitudinal research by Ekwueme and Ogunlana (2016) revealed that sustained attention to application yields appreciable dividends over time. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

application, when examined in relation to geographic, reveals complex and often paradoxical dynamics. The socio-cultural diversity of Nigeria implies that responses to application must be differentiated rather than uniform. Longitudinal research by Bello and Alade (2016) revealed that sustained attention to application yields appreciable dividends over time. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. Studies by Ogbeide and Adeniyi (2019) largely support the