

**RELATIONSHIP BETWEEN PUBLIC EXPENDITURE
ON AGRICULTURE AND AGRICULTURAL
PRODUCTION IN NEPAL**

A Thesis

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By

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DECLARATION

I, the undersigned, declare that this Master's thesis paper, entitled **Relationship between Public Expenditure on Agriculture and Agricultural Production in Nepal** is my original work and it has fully and specially acknowledged wherever adopted from other sources. This thesis has not been submitted, in whole or in part, in any previous application for a degree. I firmly understand that the document becomes a university property on its acceptance and promise to abide by the respective norms of the university in this respect.

Bina Khyaju

August, 2023

LETTER OF RECOMMENDATION

This thesis entitled **Relationship between Public Expenditure on Agriculture and Agricultural Production in Nepal** has been prepared by **Ms. Bina Khyaju** under my supervision for the partial fulfillment of the requirement for the degree of Master of Arts in Economics. I hereby, recommend this thesis for its evaluation and approval.

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APPROVAL LETTER

This thesis entitled **Relationship between Public Expenditure on Agriculture and Agricultural Production in Nepal** submitted by **Ms. Bina Khyaju** to the Central Department of Economics, Faculty of Humanities and Social Sciences, Tribhuvan University, has been evaluated and accepted as partial fulfillment of the requirement for the MASTER OF ARTS in ECONOMICS by evaluation committee comprised of:

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ABSTRACT

This study aims to investigate the relationship between the government expenditure on agriculture and agricultural production in Nepal from 1975/76 to 2021/22. The empirical research has applied Vector Autoregressive model for the time series data from 1975/76 to 2021/22. Agriculture is chiefly recognized as a mainstream economic sector in Nepal for the overall development and remained a major concern to the government, businesses, and to the general people in large. However, the share of agriculture in national GDP is reported to be in decreasing each year. The main objective of the study is to analyze relationship between public expenditure on agriculture and agriculture GDP. The study considers capital and recurrent expenditure on agriculture as the components of public expenditure on agriculture. The empirical research has applied Vector Autoregressive model for the time series data from 1975/76 to 2021/22. The study revealed that there is short run relationship between capital expenditure and recurrent expenditure in agriculture and agriculture GDP. The empirical results of the estimated model demonstrated that, for AGDP itself, first lagged period has significant positive influence on current period. The absolute value of coefficient of first period lag has a great influence on AGDP at current period than that of second period lag. Similarly, recurrent expenditure in first lagged period has positive influence on AGDP at current period. However, recurrent expenditure in second lagged period seems to have negative influence on AGDP at current period. Capital expenditure in first lagged period has positive influence on AGDP at current period. However, capital expenditure in second lagged period seems to have negative influence on AGDP at current period. The study concludes that expenditure on capital aspects plays a vital role to increase agricultural productivity and production whereas contribution of recurrent expenditure on AGDP is not statistically significant. Granger causality test showed that there is unidirectional relationship between public expenditure in agriculture and agricultural GDP. Thus, government should emphasize on increasing expenditure on agriculture along with their logical allotment and timely implementation.

Keywords: *Public expenditure, Capital expenditure, Recurrent expenditure, Agriculture GDP, VAR model, Granger Causality test, Residual test.*

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ACRONYMS

ADF	Augmented Dickey Fuller Test
AGDP	Agricultural Gross Domestic Product
AIC	Akaike Information Criterion
ARDL	Autoregressive Distributive Lag
CBS	Central Burreau of Statistics
CEA	Capital Expenditure on Agriculture
CEs	Co-integrating equations
DW	Durbin Watson
FPE	Final Prediction Error
FY	Fiscal Year
GDP	Gross Domestic Product
GSDP	Gross State Domestic Product
HQ	Hannan-Quinn
ISP	Input Subsidy Programs
LDC	Least Developed Country
LM	Lagrange- Multiplier
MDGs	Millenium Development Goals
MoAD	Ministry of Agricultural Development
MoF	Ministry of Finance
NPC	National Planning Commission
NRB	Nepal Rastra Bank
OLS	Ordinary Least Square
PCI	Per Capita Income
PSPs	Price Subsidy Programs
PIC	Philips' Posterior Information Criterion
RAGDP	Real Agriculture Gross Domestic Product
RCEA	Real Capital Expenditure on Agriculture and Forest
REA	Recurrent Expenditure on Agriculture and Forest
RREA	Real Recurrent Expenditure on Agriculture and Forest
SIC	Schwarz Information Criterion
VAR	Vector Autoregression
VECM	Vector Error Correction Model

