Returns to Education in Nepal

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A THESIS

submitted to
Kathmandu University

in partial fulfillment of
the requirements for
degree of

Doctor of Philosophy in Education

Presented January 30, 2007
Convocation September 17, 2007

AN ABSTRACT OF THE THESIS OF

Dipendra Gurung for the degree of Doctor of Philosophy in Education presented on January 30, 2007. Title: Returns to Education in Nepal.

Abstract approved: _____

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A considerable amount of public funds have been invested in education, in the belief that the full human potential may be achieved by raising the standards of educational attainment. The main concern in this study is whether these resources invested in education have been efficiently allocated.

The general approach in the economic of education is to treat educational expenditure as investment in human capital and calculate the yield to educational investment in the same manner as for physical capital. This approach is used in this study to examine the efficiency of resource allocation in education.

The theoretical framework is provided by the human capital theory, the basic premise being that variations in income are due partly to difference in labor productivity as a consequence of differing amounts of human capital acquired by workers via education or other means. The profitability measure used in this study is the internal rate of return.

The purpose of this study was to examine the contribution of education to individual earnings in the wage sector and household incomes from farm and non-farm activities in the non-wage sector. The two main sources of data in estimating the return to education in Nepal were Nepal Living Standard Surveys (NLSS I, 1995/96)

and (NLSS II, 2003/04). Mincerian standard human capital earning functions and short –cut methods were applied to Nepal Living Standard Surveys (NLSS I, 1995/96) and (NLSS II, 2003/04) data collected by CBS and World Bank in an attempt to provide evidence on rates of returns to years of schooling and education level in Nepal. Earnings from individual wage sector, household farm holdings, and non-farm enterprises were analyzed to investigate the contribution of educational investment in Nepal.

This study estimated private rates of return to years of schooling using Mincerian basic earning function method in the earning data obtained from wage sector, household farm holdings, and non-farm enterprises. Moreover, this study estimated private and social rates of return using mincerian extended earning method function in the earning data obtained from wage sector. Mincerian earning function method was extended to earnings from farm and non-farm enterprises. Short-cut method was used to estimate social rates of return to education level from wage earnings. The data were analyzed using STATA Version 8.2 computer software. Hypotheses testing were done in 95%, 99% and 99.99% confidence interval. Multicolinearity, heteroscedasticity, and normality test were carried out to diagnose the problem of estimation process.

The estimated results revealed that each extra year of schooling is profitable at the national level. The return to females is higher than males. Urban areas, Hill, Terai belt, and private schools got favorable returns. Non agriculture wage earners revealed high returns as compared to agriculture wage earners. Upper income quintile and urban areas got more favorable return.

Primary education has a very high social rate of return. Tertiary education has a very high private rate of return relative to its social rate of return, while secondary

education has relatively low private and social returns – a finding suggests increased private spending at university level and shift of public funds to other levels.

Average household education and highest schooling in the household have a significant and a positive contribution to net earnings from agriculture and non agriculture enterprises.

The study identified the specific policy implications for educational policy development for Nepal were: (a) top priority should be given to primary education as a form of human resource investment; (b) secondary and higher education should be pursued alongside with primary education in a program of balanced human resource development; (c) there exists room for private finance at the university level; (d) shifting of funds towards primary and secondary levels to raise quality and rates of return is urgent; (e) public funds should target female population, bottom quintiles and rural regions; (f) government should provide better infrastructure and modern farming inputs to improve farmer-efficiency from additional education; (g) government provide tax-break and other incentives to open up small financial/personal services enterprises from private sector; (h) educational investments are fairly attractive to other investment at both private and social level. By this, it is a clear indication that access to education could help poor population groups to raise their earnings. (i) education planners in Nepal should treat education as an important investment activity, not as consumption expenditure; (j) economic criteria should serve as baseline in making investment decisions in education, and (k) from a strictly efficiency point of view, investment in education of backward religion group and women needs to be expanded.

Dipendra Gurung

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DEDICATION

This thesis is dedicated to my father, late 'Aiman Singh Gurung', who always inspired me to be meritorious but who untimely passed way.

DECLARATION

I hereby declare that this thesis has not been submitted for candidature for any other degree.

January 30, 2007

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I understand that my thesis will become part of the permanent collection of Kathmandu University Library. My signature below authorizes release of my thesis to any reader upon request for scholarly purposes.

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ACKNOWLEDGEMENTS

This thesis is the result of the assistance of many persons and organizations.

I am most grateful to my thesis Guide, Dr. Kedar Nath Shrestha and Co-Guide Dr. Shiva Raj Lohani for the first tentative suggestions for a thesis topic to the discussion of the final drafts. Dr. Shiva Raj Lohani's friendly and insightful comments, criticism, guidance as well as continuous encouragement and support have been a constant stimulus to the improvement of this work. I wish to express my heartfelt thanks to Dr. Mana Prasad Wagley, Dr. Tanka Nath Sharma, Dr. Shree Ram Lamichhane , Dr. Gajananda Agrawal and Dr.Nasir Jalil for their invaluable advice, constructive comments, and continuous encouragement to improve the quality of work and to complete this work in time.

I wish to express my heartfelt thanks to Dr. Tak Raj Gurung. He sent more than hundred related literature from University of Cincinaty, USA. I would like to acknowledge to Mr. Mohan Khajum, data analyst, for his support to analyze data. I would like to express sincere thanks to Mr. Suvas Khatri for his support to type this thesis in time.

I would also like to acknowledge Eric Winther Smith, Amod Prasad Upadhya, Dilendra Prasad Badu, Ram Bahadur Gurung, Hari Bhakta Adhikari,Bal Krishna Khan, Prithibi Subba Gurung, Janardan Nepal, Susil Pandey, Yam Bahadur Gurung and Shashidhar Belbase for their co-operation and advice in relation to Ph. D. Studies. In addition, I greatly appreciate the financial support that I have received from PAT/DANIDA.

Finally I want to dedicate this thesis to my wife, Gita Devi Gurung, for her unconditional love and unfaltering encouragement, without which I would not have

been able to complete my thesis. I am also most grateful to my mother Chhepi Gurung and sons Sagar Gurung, Lokesh Singh Gurung and Tej Shingh Gurung for their heartfelt support.

Dipendra Gurung

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GLOSSARY

NLSS I	Nepal Living Standards Survey I (1995/96)
NLSS II	Nepal Living Standards Survey II (2003/04)
NLFS	Nepal Labour Force Survey (1998/99)
EDR	Eastern Development Region
CBS	Central Bureau of Statistics
CDR	Central Development Region
WDR	Western Development Region
MWDR	Mid Western Development Region
FWDR	Far-Western Development Region
RW Hill	Rural West Hill
RE Hill	Rural East Hill
RW Terai	Rural West Terai
RE Terai	Rural East Terai
SLC	Schooling Living Certificate
Ph. D	Doctor of Philosophy
UNDP	The United Nations Development Programme
MOES	Ministry of Education and Sports
GER	Gross Enrollment Ratios
MDG	Millennium Development Goals
PRSP	Poverty Reduction Strategy Paper
NDF	Nepal Development Forum
GDP	Gross Domestic Product
TGE	Total Government Expenditure
UNICEF	The United Nations Children's Fund
UNESCO	The United Nations Educational, Scientific and Cultural Organization
UK	United Kingdom
USA	United States of America
LSMS	Living Standard Measurement Survey
VIF	Variance Inflation Factor
PSUs	Primary Sampling Units

BSOs	Branch Statistical Offices
NGO	Non-Government Organization
PRT	Project Related Training
HPAEs	High Performing Asian Economies