PROJECT PROPOSAL PROFORMA

Date: March 17, 2017

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Course Code: **MECP-001**

Program Code: **MEC**

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Study Center Name: **St. Mary's University**

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Title of the Project: **The Contribution of Community Based Health Insurance (CBHI) in Improving access and utilization of healthcare services: The Case of Adea District, East Shoa Zone, Oromia Region**

By the Supervisor

I hereby certify that the proposal for the project entitled **"The Contribution of Community Based Health Insurance (CBHI) in Improving access and utilization of healthcare services: The Case of Adea District, East Shoa Zone, Oromia Region"** by **Zelalem Abebe Segahu** has been prepared after due consultation with me. I agree to supervise the above mentioned project till its completion.

Signature: _____

Name: Dr. Dugassa Mulugeta

Designation: Asst. Professor

Address: Addis Ababa Science & Technology University

Tel +251929304495, Addis Ababa, Ethiopia

List of Abbreviations/Acronyms

CBHI	Community Based Health Insurance
ETB	Ethiopian Birr
GTP	Growth and Transformation Plan
OOP	Out-of-pocket
OPD	Out Patient Department
USAID	United States Agency for International Development
WHO	World Health Organization

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Chapter 1: Contribution of Community Based Health Insurance in Improving Health Care Access

1.1 Introduction

Ethiopia is the second-most populous country in Sub-Saharan Africa with a population of 99.4 million, and population growth rate of 2.5% in 2015. One of the world's oldest civilizations, Ethiopia is also one of the world's poorest countries. The country's per capita income of $590 is substantially lower than the regional average (Gross National Income, Atlas Method). [1]The government aspires to reach lower-middle income status over the next decade.

The government is currently implementing the second phase of its Growth and Transformation Plan (GTP II). GTP II, which will run from 2015/16 to 2019/20, and which aims to continue improvements in physical infrastructure through public investment projects and transform the country into a manufacturing hub. The overarching goal is to turn Ethiopia into a lower-middle-income country by 2025. Currently, the health sector in Ethiopia is implementing its own version of the Growth and Transformation plan II named Health Sector Transformation Plan which has three key features; quality and equity; universal health coverage; and transformation.

As far as health is concerned, Ethiopia used to have poor health status in relation to other low-income countries although the facts seem to be reversed in recent years. Widespread poverty along with low income and education levels inadequate access to clean water and sanitation facilities and poor access to health services due to various barriers have contributed to the high burden of ill-health in the country. The average life expectancy at birth is now 64. The Infant Mortality rate is estimated at 44 per 1000 live births and under five mortality rate is 64 deaths per 1000 live births. Moreover, despite the various efforts of the government, Ethiopia still has a high maternal mortality ratio of 420/100,000 live births. In Summary, such low health status of the Ethiopian population is a cumulative result of various barriers including physical barriers, finical barriers, cultural barriers and governance problems.[2]

With the objective of mitigating the above obstacles, the Ethiopian government has been implementing various programs and initiatives which have led to the improvement of the

[1] The world Bank, Ethiopia Overview
[2] World Health Organization, Ethiopia Facts

performance of the health sector and the health status of the Ethiopian population in recent years. The expansion of primary care service through the massive construction of health posts, health centers & primary hospitals and through the deployment of 2 health extension workers in each Kebelle[3] have alleviated the problem of physical access and contributed in mitigating the effect of cultural barriers on access to modern healthcare service utilization. Similarly, the implementation of various reforms such as the institution of fee-waiver system for the poor, provision of standardized exempted services for all citizens, setting and revising of user fees based on ability to pay of the population, and just recently the introduction of prepayment mechanisms contributed in the reduction of financial barriers to modern care and in the lessening of the impoverishing impacts direct payments to healthcare on households.

CBHI was initially implemented in Ethiopia as a pilot program in 13 districts selected from four regions of the country. The pilot program was led by the Federal Ministry of Health, Regional Health Bureaus, and the local administrations. The Health Sector Financing Reform project funded by USAID and implemented by Abt Associates Inc supported the pilot implementation program through the provision of technical assistance.

Available data suggest that the use of modern healthcare services has increased since the introduction of CBHI. A pilot evaluation study conducted in 13 CBHI pilot districts authenticated CBHI was effective in increasing health service access to insured households and has provided effective protection to member households against catastrophic health expenditures.

The finding of the evaluation study showed that CBHI is meeting its objectives despite some challenges. The evaluation study among other things has indicated that CBHI has increased health service utilization by more than a double. Likewise, by taking a 15% non-food expenditure threshold only 7% of CBHI members were found to face the risk of catastrophic health expenditure while 19% for non-members were exposed to the risk of catastrophic health expenditures. The evaluation study therefore concluded that CBHI was effective in improving

[3] The lowest administrative unit in the Ethiopian government structure

healthcare access and in providing financial protection to its members against catastrophic health expenditures.[4]

The program has since then been scaled-up to more than 300 CBHI districts in the pioneer four regions and currently other regions are also at different preparatory stages to implement the program. No extensive study has been undertaken since then if the findings of the pilot evaluation are still valid in the new districts in particular and in the scale-up phase in general.

The purpose of this study is to investigate whether Community Based Health Insurance (CBHI) improves healthcare service utilization or not and if CBHI schemes are providing financial protection to their members against catastrophic out of pocket health expenditures by taking Adea CBHI scheme a case for the study.

The research questions to be addressed in this study are:

1. Is there any variation in health service utilization between members and non-members of CBHI schemes?
2. Does Community Based Health Insurance reduce out-of-pocket health expenditures for insured members as compared to non-members?

1.2 Objective of the Study

The purpose of the study is to determine whether Community Based Health Insurance (CBHI) contributes in improving health care access to its members and whether it is effective in enhancing financial protection from catastrophic health expenditures to insured households. Evidence of the contribution of Community based health insurance in promoting healthcare access will be determined by comparing if there is any differential between members and non-members in the likelihood of healthcare utilization.

Likewise, the contribution of community based health insurance in enhancing financial protection from catastrophic expenditures will be analyzed by comparing the Out-Of-Pocket health expenditures (OOPs) by CHBI members with OOPs by non-members.

[4] Evaluation of CBHI Pilot Schemes in Ethiopia, Ethiopian Health Insurance Agency, 2015

1.2.1 Specific Objectives

The specific objectives of this study are therefore to

1. Analyze the extent to which CBHI improves access to modern health care to its members as against non-members
2. Assess the degree of financial protection provided to CBHI members as opposed to non-members
3. Suggest recommendation that would improve the performance of Adea CBHI scheme in particular and CBHI program in Ethiopia in general in light of improving financial access and reducing the catastrophic impact of OOP on households.
4. Contribute to the CBHI body of knowledge

1.3 Statement of the Problem

The welfare monitoring survey carried out in 2011/12 period showed that the prevalence of illness was 16.9% i.e. about 13 million persons reported that they have health problems at least once over the two month period prior to the survey. As to the incidence of consultation, the survey revealed that at country level only 61.9 percent of the population (8.1 million persons) who had health problem had consulted for treatment. Only 59.47 percent of rural population who reported health problem consulted for medical assistance compared to 75.3 percent of the population in urban areas. More recent data of the Federal ministry of Health shows that the average OPD visit of the Ethiopian population is 0.63 per person per year which is far below the WHO standard of 2.5 visits per person required to maintain good health

The welfare monitoring survey result indicates that close to one third of the total population (29.6%) who had health problem and consulted for medical assistance reported that the service is too expensive to consult. Other notable barriers for lack of consultation by people who reported sick were problem of unavailability of drugs (18.1%), long waiting time (16.0%), lack of laboratory facilities in the health institutions visited (18.1%), shortage of health personnel and medical equipment (7.7%), and health facility staff not cooperative (7.3%); (Central Statistical Agency, 2012).[5]

[5]Ethiopian Welfare Monitoring Survey, 2012

The burden of direct payments for health by households can be verified from the fifth National Health Account which showed that OOP payment by household constitutes about 34% of the total health expenditure of the nation. This very high proportion of OOP payment has a potential to be catastrophic and impoverishing. In fact the WHO recommends OOP payments in a country should not exceed the threshold of 20%[6] of the total health expenditures of that country beyond which all figures are considered to potentially have catastrophic effects.

With the above background in mind, Community Based Health Insurance was initiated in Ethiopia with multiple objectives among which increasing healthcare access of the rural population and enhancing financial protection to them were part of the objectives set for the program.

Apart from the findings of the pilot evaluation and a few studies conducted on the pilot districts, new concrete evidence is yet to come about the contribution of community based insurance in increasing healthcare utilization and improving financial protection on a sustainable basis.

1.4 Significance of the Study

There have been some studies conducted on the performance of community based health insurance in Ethiopia since its initiation in 2011. The studies conducted so far on Ethiopian CBHI including the pilot evaluation study confirmed that the CBHI program is meeting its objectives despite some challenges. There have also been a number of studies undertaken by various researches on community based health insurance schemes elsewhere some confirming the contribution of the schemes in improving healthcare access and reducing OOP and others disproving these arguments.

The studies that have been conducted so far are however somehow obsolete since there are changes in the operation, follow-up and support of schemes.

There is therefore still the need to investigate empirically the role of community based health insurance in improving access to healthcare and reducing the effect of catastrophic health expenditures.

[6] WHO Macroeconomic Commission for Health, 2014

The study also hopes to generate evidence that will be used by policy makers to make informed policy decisions as far as CBHI is concerned.

1.5 Scope and Limitations of the Study

The study will focus on data collected from one CBHI scheme. Any generalization that will be made based on the findings of this study may therefore have limitation in applying in other settings. Moreover, the study covers the Kebelles which are accessible and relatively proximate to a health facility affecting their health seeking behavior. Hence, there is a possibility of self-selection where residents are more likely to enroll to CBHI schemes because of their high level awareness about the benefits of modern health care services.

1.6 Organization of the Thesis

The study will be organized in five parts: Chapter one will contain the introduction to the study. It will provide background information about the research problem, the context of health financing sources and background to CBHI. Discussion on the significance of the study, the research objectives, definition of key terminologies, and the research design and methods will all be contained in this chapter.

Chapter two will review the literature on CBHI. The Concept of CBHI, its main characteristics, goals, principles, as well as potential benefits and outcomes will be discussed. A discussion on key design elements of the Ethiopian CBHI model will also be included in this chapter.

Chapter three is research design and method. It will discuss the research design followed and possible covariates and the research method used.

Chapter four is analysis, presentation and description of the research findings.

Chapter five is Conclusions and Recommendations. It will highlight the major findings of the study on the basis of the discussions. It will draw general conclusions relating to the role of Community Based Health Insurance in improving health care service utilization and financial protection in Ethiopia. It will also contain policy recommendations that the author believes would improve the performance of CBHI schemes in respect of the research questions.

1.7 Expected Outcome

This study expects to establish the insurance theory which states that health insurance reduces the price of healthcare services and hence increase consumption of healthcare services by members of an insurance scheme. In doing so the study expects to identify the relationship between the major dependent variable i.e. access to healthcare and the major independent variable i.e. insurance membership status and other covariates that affect health insurance membership and healthcare utilization.

Chapter 2 Methodology of the Study

This research will use both primary and secondary data sources in order to establish relationships essential for prediction of measurable outcomes. The study will be guided by facts witnessed through quantitative analysis of the data and hence is mainly in the stream of positivism paradigm.

2.1 Study Setting

This study focuses on Adea CBHI scheme which covers the residents of Adea district. The district is found in Oromia regional state in East Shoa zone and is 42 Kms form Addis Ababa. The total population of the district is 138,383. In terms of household size the district has – households. The scheme has so far registered 11,693 households as CBHI members making the enrollment ratio of the district 45%. The scheme has entered contractual agreement with 6 health centers, 2 hospital and 2 drug outlets as providers of healthcare services for its beneficiaries. The scheme was established in 2015.

2.2 Data Sources

The study will use both primary and secondary data sources. The primary data sources include data that will be collected through household survey, key informant interview and CBHI scheme routine data. Furthermore, secondary data sources such as previous works, government reports and other relevant literature will be used will be used for the study.

2.3 Sampling Design and Size

The study will use two-stage sampling method to select the households for the study. At the first stage the Kebelles that will be covered in the study will be purposively selected based on proximity and access. Next, the households that will respond to the survey will be selected using systematic random sampling from a complete list of the residents of a Kebelle.

As the study will address both insured and non-insured household of the district, the non-insured members that will be selected for the survey will be those households that are closest to the insured households included in the sample in terms of distance of their residential house.

Structured questionnaire to collect information from the households on their socioeconomic and demographic characteristics and health service utilization will be developed. The data will be collected through health extension workers after giving adequate orientation on the technical issues and contents of the instrument. Furthermore, interview question to guide the discussion with key informants at the scheme and health facilities will be developed.

2.4 Sample Size

Adea CBHI scheme has 25947 eligible households out of which 11693 households are registered CBHI members. Hence the sample size for the study that would be representative of the population is determined using the following formula.

$$n = \frac{Z^2 P(1-P)}{e2}$$

Where;

n= sample size

P = proportion of residents who are CBHI members

e= the margin of error which is set at 5% here

Z = the confidence interval which is 1.96 at confidence interval of 95%.

Hence the total number of respondents included in the survey will be 375. However, given the resource limitation only 40% of the above will be taken as a sample size for this study. Hence the total number of household that will be covered through the survey 151 out of which 68 are CBHI member households and the remaining 83 are CBHI non-members households. Regarding key informant interviews, the coordinator of the CBHI scheme and heads of three health centers out of the six health centers contracted with the scheme will be interviewed.

2.5 Data Analysis

The data collected for the study will be analyzed using standard statistical packages. Two models will be used in this study to estimate first, the probability of access to basic health care services for the insured and uninsured population groups; and second, the estimated out-of-

pocket health expenditures of households as a proportion of their capacity to pay to study the impact of CBHI on financial protection. The study will use logistic regression model to analyze the relationship between the variables under study.

References

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Annex 1: Time schedule & Budget Requirement

Description	Time Frame														Resource Required in ETB
	March		April				May				June				
	Week		Week				Week				Week				
	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	
Finalize proposal	x	x													1,000.00
Finalize data collection instruments		x													
Agree with Health extension workers to work as data collectors		x													
Train data collectors			x												5,000.00
Pretest data collection instruments				x											
Collect data					x	x									20,000.00
Scrutinize and encode data						x	x								5,000.00
Clean data							x	x							
Produce preliminary tables and analyze results									x	x	x				
Write report											x	x	x		2,500.00
Submit initial report to advisor													x	x	
Submit Final Report														x	

Annex 2 Curriculum Vitae of the Advisor

1 Personal Data

Full Name: Dugassa Mulugeta Jenna

Birthplace: East Wollege Zone, Oromia National Regional State, Ethiopia

Birth date: August 19/1968

Sex: male

Nationality: Ethiopia

Address: Telephone +251911407198 or +251929304495 (mobile)

E-mail: dugassa_dr@yahoo.com

P.O.box; 25365 codes 1000, Addis Ababa, Ethiopia

1. Educational Background

No.	School/Institutions attended	Awards and year	Academic status
1	Saint Petersburg State University	PhD in Economics, 2000	PhD
2	Saint Petersburg State University	M.Sc/ BSc in Economics, 1991-1996	M.Sc/BSc.
3	Haramaya University	Diploma in Biology 1981-1983	Diploma

2. Work Experience:

- 1983-1990 high school teachers in Biology at Mizan Tefferi and Agaro high schools.
- 2000-2003 instructor at Unity University (Department of Economics)
- *2004-2006 Academic Dean* in New Generation University College and instructor of Macroeconomics, Business Research and Research Methodology and International Economics.
- 2006-2010 *Senior Instructors* at City University College (Zegha Business College): Macro and Microeconomics, Research Methodology, Entrepreneurship, Development Economics and Managerial Economics.

- ❖ 2007 –2010 Instructor at Addis Ababa University on Part Time Base (Managerial Economics both at regular and extension levels)
- ❖ 2011--until now full time employee at Addis Ababa Science and Technology University
- ❖ Currently I am a full employee of Addis Ababa Science and Technology University, College of Business and Management, Director of Quality Assurance and Enhancement

3. Office Experience

- ❖ 2005- 2006 Dean at New Generation University College
- ❖ 2006-2011 Head of Research & Development, Quality Audit and Assurance Unit at City University College
- ❖ 2011-2016 Dean, School of Business and Management at A.A.S.T.U
- ❖ Currently Quality Assurance & Enhancement Directorate Director at Addis Ababa Science & Technology University

4. Language Proficiency

- ❖ Amharic ---Fluent in reading, writing, listening and speaking (Federal language)
- ❖ English ---- Fluent in reading, writing, listening and speaking
- ❖ Affan Ororo--Fluent in reading, writing, listening and speaking
- ❖ Russian Language---- Fluent in reading, writing, listening and speaking

5. Field of Professional Interests

- ❖ Research on Economic Growth and Development, Globalization, Socio-economic problems, including Unemployment, Migration (Emigration and Immigration, Environmental Economics and Green Economy
- ❖ Writing Text Books and handouts.
- ❖ Writing course materials (modules) for distance learners
- ❖ Curriculum preparation and development

6. Participation on Training Programs:

- ❖ Training Customers on" Business Management "In Unity University College, 2000
- ❖ Paper presentation at "The First Multidisciplinary Conference" organized by Unity University College from July 5-7, 2002
- ❖ The "Impact of Culture on Development" held on April 18-28, 2005 organized by NGUC in collaboration with Ministry of Youth, Sport and Culture and UNSCO
- ❖ Training seminar on "Managing Your Business in Today's Changing World" organized by New Generation University College with Dr. William Rice, Professor at California State University, USA,
- ❖ Paper presented at UNCC on "The Impact of Working Culture on Socio-Economic Development in Ethiopia", September 21-22, 2006 (ILO & CETU)
- ❖ Global Financial-Economic Crisis and its Impact on the Ethiopian Economy-Presented on January 21, 2010 at the National Conference
- ❖ Economic Transformation: Sustainable Growth & Development in Ethiopia, National Symposium at Wollega University (December 26-27/2014
- ❖ Training on "Transformational Leadership" for Confederation of the Ethiopian Trade Unions, August 19, 2014

- ❖ Training on "Transformational Leadership" for Addis Ababa Science & Technology Management & Staff members, September 14, 2015

7. I offered the following courses at different levels:
   - ❖ Macroeconomics Theory
   - ❖ International Economics
   - ❖ International Business
   - ❖ History of Economic Thought and Recent Trends in Economic Thought
   - ❖ Public Finance and Fiscal policy (both at under graduate and Post graduate levels)
   - ❖ Development Economics for post-graduate students in St. Mary's University (in collaboration with the Indira Gandhi National Open University-Guest Lecturer)
   - ❖ Economics of Growth and Development for Post Graduate students in St. Mary's University (in collaboration with Indira Gandhi National Open University (Guest Lecturer)
   - ❖ Development Economics for Post Graduate students in Adama University
   - ❖ Managerial Economics (Coop.522) for Post Graduate Students, Ambo University, Block course (Guest Lecturer)

8. I have prepared the following educational materials:
   - ❖ Microeconomics Theory I (Course material or module for distance education) For Adams University College.
   - ❖ Macroeconomics Theory I (Course material or module for distance education) For Adams University College.
   - ❖ Principles of Marketing (Course material or module for distance education)
   - ❖ Introduction to Business (Course material for distance education)
   - ❖ Public Finance and Fiscal Policy (New Generation University College)
   - ❖ Money, Banking and Financial Systems (Admas University College)
   - ❖ History of Economic Thought (Course material for distance education) for Alpha University College.
   - ❖ Macroeconomics Theory II (Course material for distance education) for Adams University College.
   - ❖ Curriculum preparation for Queen's College (Economics Courses).
   - ❖ Curriculum preparation and development (all Economics Courses) for City University College (Zegha Business College).

9. Others
   - ❖ An article on "Globalization and Its Impact on the World Economy"
   - ❖ An article on "HIV/AIDS: The Global Challenge of Human beings"
   - ❖ Foreign Economic Relations of the European Union with African Countries: The Case of Ethiopia