TO LAST OR NOT TO LAST-
Exploring sustainability strategies of Faith Based Organizations (FBOs) and external donor agencies implementing Health Projects in Upper East Region (UER) of Ghana.

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51st International Course in Health Development/Master of Public Health (ICHD/MPH)
September 22, 2014 – September 11, 2015

KIT (ROYAL TROPICAL INSTITUTE)
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TITLE: Exploring sustainability strategies of Faith Based organizations (FBOs) and external donor agencies implementing Health Projects in Upper East Region (UER) of Ghana.

A thesis submitted in partial fulfilment of the requirement for the degree of Master of Public Health

by

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Declaration:
Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.
The thesis "Exploring sustainability strategies of Faith Based Organizations (FBOs) and external donor agencies implementing Health Projects in Upper East Region (UER) of Ghana" is my own work.

Signature:

51st International Course in Health Development (ICHD)
September 22, 2014 – September 11, 2015
KIT (Royal Tropical Institute)/ Vrije Universiteit Amsterdam
Amsterdam, The Netherlands

September 2015

Organised by:

KIT (Royal Tropical Institute) Health Unit
Amsterdam, The Netherlands

In co-operation with:

Vrije Universiteit Amsterdam/ Free University of Amsterdam (VU)
Amsterdam, The Netherlands

ACKNOLEDGEMENTS

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Abbreviations

APOC	African Programme for Onchocerciasis Control of WHO
CHAG	Christian Health Association of Ghana
CHPS	Community Health Planning and Services
CHS	Catholic Health Service
DPC	Donor Project Coordinator
GhC	Ghana Cedis
GHS	Ghana Health Service
GoG	Government of Ghana
HSMTDP	Health Sector Medium Term Development Plan
IMP	Implementer Project Coordinator
IGF	Internally Generated Funds
LMIC	Low and Middle Income Countries
MoF	Ministry of Finance
MoH	Ministry of Health
NHIS	National Health Insurance Scheme
NPHS	Northern Presbyterian Health Service
ODA	Official Development Assistance
OPP	Out of Pocket Payment
RUWASA	Rural Water and Sanitation Project
SBS	Sector Budget Support
UER	Upper East Region
USD	United States Dollar
WHO	World Health Organization

Abstract

Background: Sustainability of health interventions is a global concern as externally funded project benefits are often lost as soon as the funding ends. Researchers, policy makers, donors, implementers and communities are often faced with difficulty in answering questions relating to sustainability of health innovations or projects. This paper seeks to explore the sustainability strategies of Faith Based Organizations (FBOs) and external donor agencies implementing health projects in the Upper East Region of Ghana.

Methods: Existing health science literature on project sustainability was reviewed to understand what has been learned to date about sustainability. Two case studies on FBOs and external donors were carried out to explore their sustainability strategies of projects they implement.

Results: In the review, sustainability is defined and used differently in different contexts; we found three distinct dimensions which are used to assess sustainability: Maintaining health benefits achieved through the initial project; Continuation of the program activities within an organizational structure; and building the capacity of the recipient community. Factors that influence sustainability are categorized in to three; project design and implementation factors; factors within the organizational setting and factors in the broader community. In the case studies, FOBs and donors did consider some sustainability strategies in the design and implementation of their projects. The influencing factors noted by FBOs and donors were similar to the finding of the review.

Conclusion: there is paucity of evidence of sustainability of health projects but sustainability is possible with the right internal or external influencing factors.

Key words: sustainability; externally funded health projects; Faith Based Organizations; external donors.

Word count: 12,203

Preamble

This paper is about "Exploring sustainability strategies of Faith Based Organizations (FBOs) and external donor agencies implementing Health Projects in Upper East Region (UER) of Ghana". The author of this master thesis is a Nurse by profession and worked for the Catholic Health Service for 13 years. For the past 5 years, I worked as a Health management information system officer and at the same time as a project officer for school health services.

With my previous experiences with implemented health projects and as a project officer for school health services, I realized that a lot of externally funded projects that have been implemented by my organization ended as soon as the external donor funds ended. I became interested in project sustainability and when I got the admission to study a master in Public Health an opportunity was given to ask a question that I would like to be answered at the end of the course and my question was "How can health projects be sustained"? In this thesis I tried to find answers by exploring the sustainability strategies used by donor agencies and implementing FBOs to sustain externally funded health projects in the Upper East Region of Ghana.

It is important to study sustainability of projects, for most of health innovations in Low and Middle-income Countries (LMIC) are project based. Service providers such as FBOs implement these projects sometimes in remote areas that are in need of innovative health projects (examples of such projects are related to Primary Health Care and Sexual and Reproductive Health and rights),

The reason why this topic is the focus of this paper is that most of these project initiatives have a high risk of not being sustainable, which may lead to a waste of valuable resources, in terms of financial investments, infrastructure, human resources and the possibility of jeopardizing communities and donors support and trust in Public health interventions.

CHAPTER 1: BACKGROUND INFORMATION

1.1   Introduction

Ghana is one of Sub-Saharan African countries, located in the western part of Africa. It has a population of about 27 million.[1] The country is divided into ten administrative regions of which the greater Accra region is the capital city. For the purpose of this paper, the Upper East Region in the northern part of the country is the main focus area.

Ghana has a well-developed, integrated and decentralized health system throughout the whole country.[2] The system consists of the Ministry of Health (MoH) which is the governing body that oversees three main sectors: the service providers; regulatory bodies and the National Health Insurance Authority (figure 1). The service providers are: Ghana Health service (GHS) the largest public provider; Christian Health Association of Ghana (CHAG), which is a union of 21 Faith Based Organizations (FBOs) that work on a not-for–profit basis; the private for-profit health providers; the Teaching Hospitals; Psychiatry Hospitals; and the National Ambulance service. This paper studies some FBOs as service providers who implement health projects that are externally funded in the Upper East Region (UER) of Ghana.
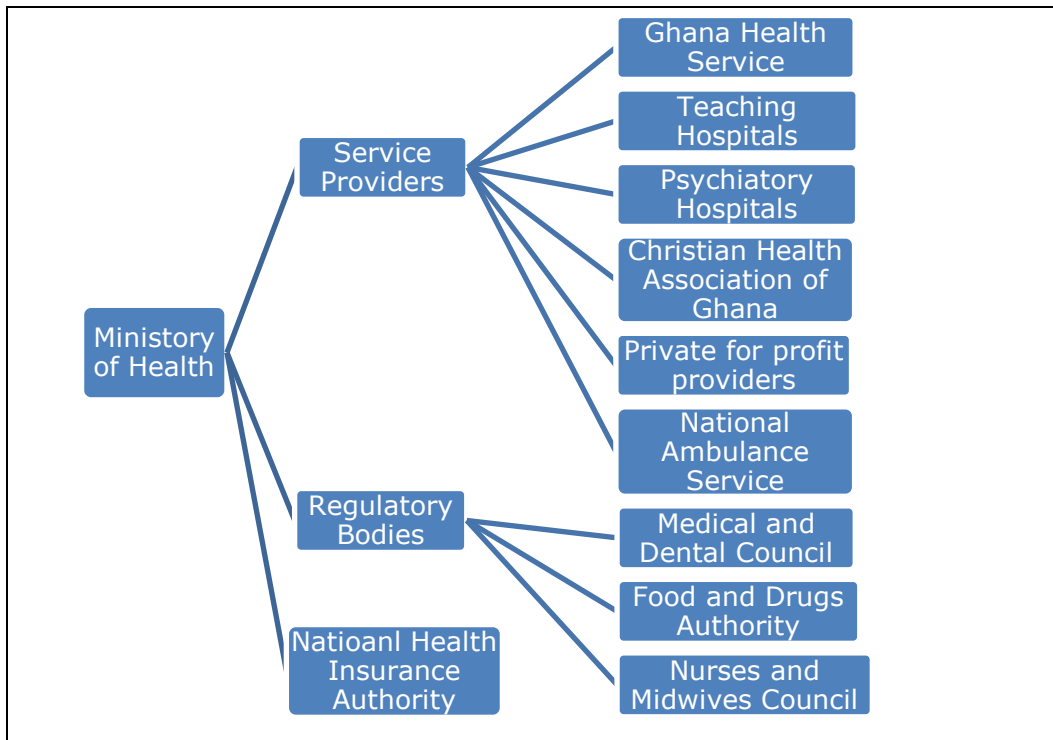
Figure 1: organization of Ghana's health system[3]

The health system has four levels of service delivery.

Level A: Community-based Health Planning and Services (CHPS) and clinics,

Level B: Health Centers

Level C: District Hospitals

Level D: Regional Hospitals and Teaching Hospitals.

Government is the major provider of fund for the financing of health care. However, based on the updated indicators of the Health Sector Medium Term Development Plan (HSMTDP), government's budgetary allocation to health is below the 15% of the annual budget as proposed by the Abuja declaration (figure 2).[4] Other sources of funds are; international funds and private funds.[5]
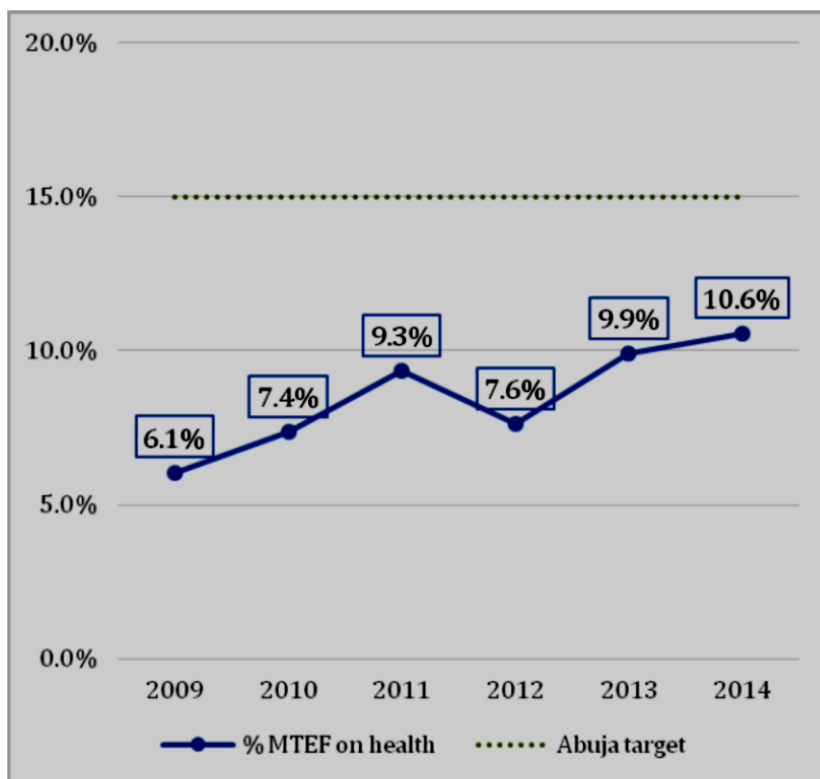
Figure 2: Allocation of national budget to health sector.[4]

The health expenditure in Ghana Cedis (GhC) increased from 2,709 million GhC in 2013 to 2,866 million GhC in 2014 (figure 3).[4] As a result of population increase and inflation of the GhC to the United State Dollar (USD), the per capita expenditure in USD decreased by 30% from 47 USD in

2013 to 33 USD in 2014.[4] About 11% of the total Government of Ghana (GoG) expenditure including Sector Budget Support (SBS) was spent on goods and services, while 87% was spent on compensation and only about 2% went into assets.[4]
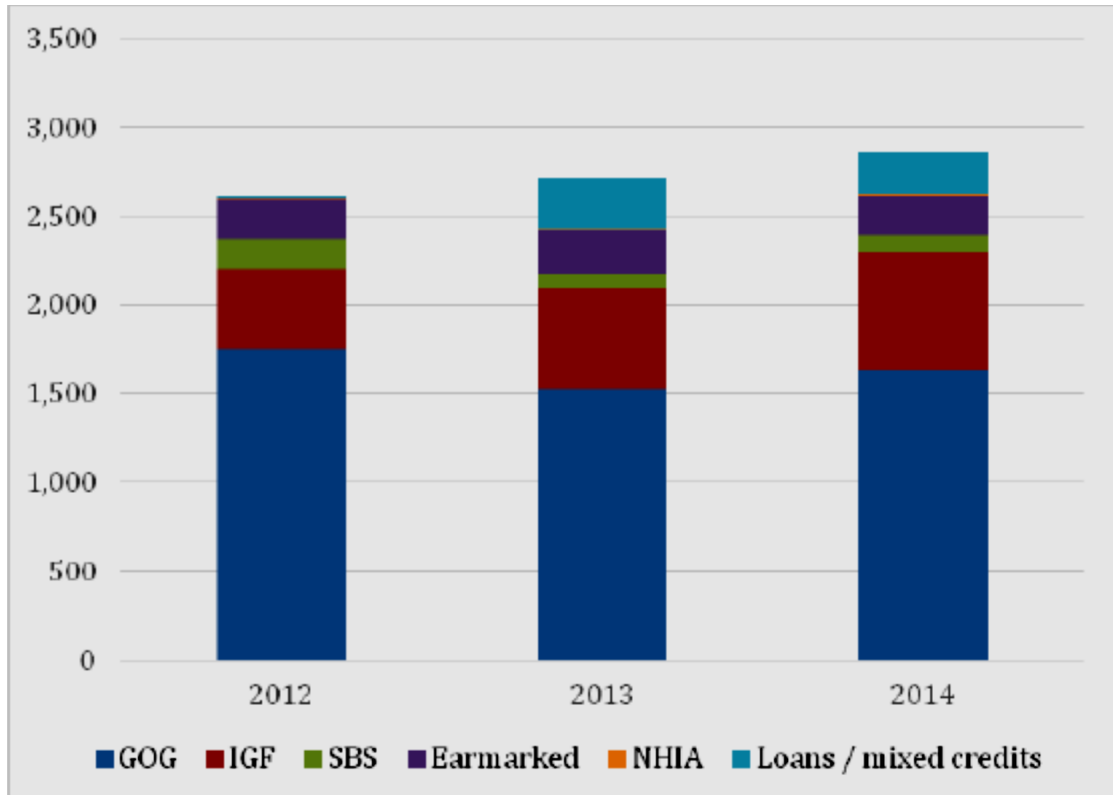
Figure 3: Annual expenditure by source.[4]

CHAG is made up of 183 health facilities and health training institutions owned by 21 different Christian denominations. They are present in all the 10 regions of Ghana providing health care mostly in the rural and deprived areas. Their training institutions are located in some parts of the country. Health financing among CHAG health facilities is mainly Government of Ghana (GoG) in the form of salaries for staff, internally generated fund (IGF) which comes from National Health Insurance Scheme (NHIS) as well as out of pocket payment (OPP), and last source of fund is from donor grants support for projects.

1.2   Importance of studying sustainability of health projects

Researchers, policy makers, donors, implementers and communities are often faced with difficulty in answering questions relating to sustainability of health innovations or projects.[6] Questions about sustainability often arise from projects that are initiated and initially (co-)funded by external donors. Questions such as; Do projects and other interventions that receive short-term funding continue after that investment ends? Can researchers show evidence for strategies that enhance the sustainability of health service projects? are always asked in relation to sustainability. Answers to these questions are not straight forward because the term sustainability in relation to health projects is not clear in its definition.

In the broader international arena with respect to Official Development Assistance (ODA), notwithstanding the wealth of research based on ODA available, there are questions regarding the fragmentation of funding[7,8] such as; how should aid be disbursed? What modality and approaches are most effective; for example, project-oriented, general budget, or multi-sectoral in terms of outcomes and outputs? What is the linkage between disbursement and actual spending? A study done by Morgan et al[9] provides a useful contribution to whether programme specific funding has been targeted to countries with the greatest needs. Moreover, there is the need for more international efforts to further investigate the aforementioned questions.[10] External resources for health as a percentage of total health expenditure in African region increase from 7.0% in 2000 to 11.5% in 2012.[11] The level of support buttress the point of studying sustainability of project to better understand and incorporate sustainability planning in future health projects.

Furthermore, sustainability is sometimes identified as a sub-concept or a broader concept of implementation[12] outcomes of projects or a criterion for the assessment of effectiveness of development.[13] Indeed, factors that influence initial implementation of a health project are not necessarily the same factors that would influence decisions to continue the project for longer term sustainability.[6,14]

It is important to study sustainability of projects, for most of health innovations in Low and Middle-income Countries (LMIC) are project based. Service providers such as FBOs implement these projects sometimes in remote areas that are in need of innovative health projects (examples of

such projects are related to Primary Health Care and Sexual and Reproductive Health and rights), but there is paucity of evidence when it comes to how to sustain projects, which poses a potential threat to maintaining achieved health goals. This may lead to waste of valuable resources in terms of financial investments, infrastructure and human resources, lack of trust among donors, implementers and especially the beneficiary of the projects.[15]

The focus of this paper is to explore sustainability strategies of externally funded projects in health, implemented by FBOs, specifically the Catholic and Presbyterian Health Services in the UER, and the external donors (Cordaid and Simavi, respectively) who provide funding for these projects.

For the purpose of this paper, the terms project, programme and donor(s) are defined as follows;

A *project* can be defined as a set of activities coordinated and implemented by an individual or an organization to meet specific objectives and results with a defined time schedule and a limited duration, a certain cost and, ideally, a defined set of performance parameters. It can be funded by external donor agency, by a domestic agency example Ministry of Finance (MoF) or MoH, or the local implementing organization that uses its own resources example FBO or NGO.

A *programme* can be defined as an ongoing set of routine activities that is designed, implemented and coordinated by organization(s) in order to achieve common objectives. A programme may or may not have a limited duration. It may comprise several projects with a similar aim. For instance polio or measles eradication projects with the aim of preventing childhood diseases.

A project may or may not be absorbed into a programme after the project is ended. Readers may come across both terms in this paper which relates to the referred literature but the focus of this paper is on projects that are externally funded.

The terms "project", "programme" and "intervention" are used interchangeably to refer to the same.

A *donor* refers to an external agency that provides funding directly to NGOs and or FBOs to implement health projects or programmes. The terms

donor(s) and funder(s) are sometimes used interchangeably to mean the same thing.

1.3 Sustainability of projects or programmes as a concept

The concept of sustainability in projects or programmes seems to be defined and used in many different ways. Several terms have been used by researchers such as continuity, confirmation, sustenance, durability, perennity, viability, routinization, incorporation, and institutionalization. [14,16–20] Literally, there are differences in the meaning of these terms, but presumably, they are all referring to long-term effects. Below are some definitions clarifying some of the terms used by different schools such as; management science; development studies and economics. Although these terms are used in relation to programmes, they are also used in this study's concept of externally funded health projects.

A. School of management science

- Organizational change ultimately involves the process by which new practices become standard business in a local agency. Whether the process is called routinization, institutionalization, incorporation, or some other term, it is central to all organizations...[21]

The school of management science seems to define sustainability of a project or programme based on the continuance of the activities and not the benefits it provides.

B. Schools of economics

- "Sustainability concerns the specification of a set of actions to be taken by present persons that will not diminish the prospects of future persons to enjoy levels of consumption, wealth, utility, or welfare comparable to those enjoyed by present persons".[22]

C. School of development agencies

- "Project sustainability is defined by many economists and international development agencies as the capacity of a project to continue to deliver its intended benefits over a long period of time".[23]

- "Sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdrawn.

Projects need to be environmentally as well as financially sustainable".[13]

Definitions from schools of economics and development agencies are emphasizing sustainability of project or programme to be the continuation of the benefits delivered.

Shediac and Bone[16] argued that sustainability is important as policy makers and funders are concerned with effective and efficient allocation of scarce resources for health programmes. They look at sustainability by formulating three elements or dimensions of the concept which include:

1. Maintaining health benefits achieved through the initial programme,
2. Continuation of the program activities within an organizational structure and,
3. Building the capacity of the recipient community.

These three dimensions are equally used as a guide to measure sustainability. Others build upon their work by developing sustainability planning models. These dimensions are discussed more in the results section of this paper.

In the context of externally funded projects in health in LMIC, donors may provide the funding hoping that a project will go a long way to help the country and the communities in general where the activities are implemented.[19] Donors are always hopeful that there would be some form of institutional development or capacity building which can be incorporated in to the implementing organization or replicated to other places.[19] While donor funds can bring a quick and temporal change, maintaining the change is often a challenge.[19] When the aim is to introduce innovations or change into an existing organization or a health system, there are usually problems or barriers that cannot always be foreseen. Examples of barriers include;

- Lack of existing staff capacity: staff may need new skills which may require training to enable them to perform in accordance to the new change;[19,24,25]
- Lack of organizational capacity to implement the project in terms of weak administrative structure and leadership can become a barrier to sustainability;[26]
- Lack of longer time frame for projects can be a barrier. The funding of projects that are short term usually 1 to 5 years, has a conflict with

the time needed for the innovation to reach fruition for possible continuation or perhaps to stimulate system change for projects that envisage a change.[27] On the other hand, the sustainability of long term projects (more than 5 years) involve changes in the individual, organization and institutional level.[18]

- Other barriers to sustainability include; lack of communities or beneficiaries involvement in the project design and implementation[28] and lack of continued flow of resource and funding for the project.

Factors that can influence sustainability are the reverse of the barriers of sustainability. They are categorized in to three factors by Shediac and Bones[16] which includes the following; factors leading to a good project design and implementation; factors within implementing organizational setting; and factors in the broader community environment. These factors are stated by other articles in the literature with some referring to Shediac and Bones and others state them without categories.[19,20,24,25,28,29] More explanation of these factors is given in the methodology section of this paper. These factors are not only indicative of project sustainability but also for project initiation and subsequent implementation.[14] For projects to be sustained, attention should be paid to sustainability at the beginning of the design of the project[30,31] as well as the whole life cycle of the project including the adaptation of the project to the local context.[27]

CHAPTER 2: PROBLEM DESCRIPTION AND OBJECTIVES

2.1 Statement of the problem

Sustainability of health innovations or projects has become increasingly important to researchers, policy makers, donors, implementers and communities who are often faced with difficulty of sustaining seemingly worthwhile health projects, mostly in low resource settings, for instance in LMIC.[6,15,32] Donors and implementers mostly want to know if the outcome of their investment yields long-term benefits.[14,20] The available literature on health project sustainability identifies issues related to sustainability as: projects that are internally generated by a community or implementing organization turn to be more sustainable than those generated by donors. Donors may have a focus on health issues they intend to fund and implementers then develop projects based on recommendations which are not their own. This raises a question as to whether it is right for donors to develop projects and then expect the implementers to sustain them;[14] donors expect measurable outcomes for beneficiaries; and lastly, funding ends at the time activities have reached full fruition.[16,29] Another important issue is that sustainability of health projects is a good topic for research with the context of translational and dissemination of effective projects in public health settings, yet literature has not developed complete methodology that can produce results to generalize findings.[14,20]

Externally funded projects are often vibrant in the implementation phase, but after the end of the funding phase of the project, some or all activities may come to a standstill. The possible reasons why this problem exists relates to the reason that donor agencies tend to be overambitious for projects given their limited duration. They focused on improved health outcomes after a relatively short period of time in one particular domain (example malaria), without necessarily fully realizing what it requires to achieve and continue such results. The possible consequences that one can think of at this point in time could be the stand till of activities at the end of the project, lack of capacity building on implementing organization, lack of integration of the project into the implementing organization, lack of community ownership of the concept of the project, and finally lack of financial sustainability for the project in the future.

This paper seeks to review literature on sustainability of projects and explore sustainability strategies in the design and implementation phase of health

projects (by external donors as well as FBOs) in the Upper East Region (UER) of Ghana.

2.2 Justification

In the researcher's past experience, many private not-for-profit providers of health services in Ghana, especially local FBOs, get funding from external donors to implement projects and other health services. Whenever the funding comes to an end, activities of the project also come to an end. The local FBOs look for another funding source to start another project. A lot of money has gone and is still going into health projects in Ghana by external donor agencies and local FBOs. This paper seeks to explore some external donor agencies and local FBOs to find out whether they have sustainability strategies alongside the investment and the projects implemented respectfully.

There have been some researches done relating to sustainability of funded health projects in low and middle-income countries (LMIC) such as Uganda, Tanzania and China. In Uganda, lessons are drawn from a Rural Water and Sanitation (RUWASA) project to implement maternal health interventions. Community engagement, contributions and use of community structure and ownership were identified as factors for the project sustainability.[33] In Tanzania, important determinants of sustainability included efforts that built community capacity and that mobilized both informal and formal systems in communities.[28] In China, the importance of program champions, local support, staffing levels, institutionalization and adaptation to local contexts were critical in sustaining improvements in maternal and child health.[19] Despite the contributions of these three articles, the paucity of evidence regarding the sustainability of health projects limits evidence-based informed planning for future projects. No research has been done in Ghana especially relating to sustainability of health projects funded by external donors and implemented by local FBOs.

2.3 Objective

The overall objective of this thesis is to explore the sustainability strategies used by donor agencies and implementing FBOs to sustain externally funded health projects in the Upper East Region of Ghana.

2.3.1   Specific objectives

3   To identify existing health science literature on project sustainability in order to understand its different dimensions and how sustainability may be achieved.

4   To explore whether external donor agencies and FBOs in Ghana consider sustainability strategies in the design phase of health projects and if so, which strategies are implemented.

5   To identify facilitators and barriers of sustainability encountered by external donors agencies and local FBOs.

6   To make recommendations for donors, implementers and beneficiaries of externally funded projects.

CHAPTER 3: METHODOLOGY

This study is a review of literature on the concept of sustainability of projects and case studies of donors and implementers of health projects in Ghana's Upper East Region. In the review, literature was searched for research that has been done on sustainability of health projects that were funded in the international arena. In the case studies, interviews were used as an instrument for data collection from project coordinators of implementers and donors of health projects.

The literature review was to gain a good understanding of the concept of sustainability at first hand, and to allow for a comparison of what is in the literature and what is been done . Also, the case studies of the two different donors and implementers of projects were to again allow room to relate their existing sustainability strategies with the literature.

3.1 Search strategy

The literature was searched electronically using VU e-library to find articles in databases such as PubMed/NCBI, Web of science, Science Direct, and MD Consult. The following key words "continuity, confirmation, sustenance, durability, perennity, viability, routinization, incorporation, and institutionalization" were used. Snowballing strategy was used by searching references of found literature on reviews of implementation and sustainability.[16,19,20,29,34] Literature was searched in the English language only and the date of publication was not limited. The preferred geographical areas for the search were sub-Saharan Africa and Africa. Search was extended to other parts of the world such as India, Australia, the United States of America and China when enough literature was not found in the preferred geographic areas. The number of articles found in the search and the number that was used in this paper are explained in the review method section.

3.2   Inclusion and exclusion criteria

The inclusion criteria were:

a. Studies that were done on sustainability of projects or programmes in health science;
b. Published before or in 2015;
c. Peer-reviewed or evaluative reports on project sustainability and
d. Written in English language only.

The terms that were used to define sustainability as indicated earlier were also used as a criterion for including articles. Articles were excluded if they did not study or report on sustainability of health projects or if sustainability was studied in a different field other than health science.

3.3   Review method

The titles and abstracts of searched articles were first reviewed and the criteria for inclusion and exclusion applied. In situations where it was not possible to include or exclude from the title and abstract, a full text was searched and assessed. Furthermore, full text of referenced potential articles identified from the reference list of included articles were also searched and obtained. A total of 117 articles were found. Out of the 117 articles, 53 articles were assessed and determined to be potential for the review. Out of the 53 articles considered to be potential for the review, 15 of them focused on methodologies and frameworks for studying sustainability and 8 of the articles focused on literature reviews of sustainability. The rest of the articles focused on sustainability of interventions in Public health or health promotion, medical care, sexual and reproductive health and mental health. Figure 4 is a diagram that summarizes the selection process of the article.

3.4   Case studies

Two case studies were carried out on two different FBOs implementing health projects that were funded by two external donor agencies. The case studies were mainly on sustainability strategies that were in place for the projects they implemented and sponsored respectfully. The two FBOs were, the Catholic Health Service (CHS) of the Navrongo-Bolgatanga Diocese and the Northern Presbyterian Health Services (NPHS) which are both located in the Upper East Region (UER) of Ghana and operate in different Districts in

the region. They are the largest FBOs who get external funding to implement health projects. They were suitable and convenient for the case studies because of their location in the rural poor areas that are in need of innovative health projects and their access to external donor fund, as well as projects they implement have limited duration of 1 to 5 years. The two donor agencies were Cordaid and Simavi in the Netherlands who fund projects implemented by CHS and NPHS. The donors were also convenient because of their role in the projects implemented.

Interviews were used to collect data on the strategies of sustainability from project coordinators of implementers and donors. One project coordinator each of the two implementers and two donors were interviewed using an interview guide (annex I). Two project coordinators of the implementers and one project coordinator of the donors were interviewed through Skype, while one donor project coordinator was interviewed face to face. Using skype was convenient because of the distance on the part of the researcher to reach the implementers in Ghana but the disadvantage was bad internet connections that caused a lot of repetition of the process. The interviews were recorded and later transcribed in to English language. The transcribed interviews were analyzed for enablers and barriers of sustainability.

First search
- 117 articles identified

Articles exluded
- 64 Articles, of which:
  - 15 on international aid without sustainability
  - 39 financial sustainability only
  - 10 long term follow up on clinical trails

Final articles selected
- 53 Articles, of which:
  - 15 on methodologies and frameworks of project sustaianbility
  - 8 on literature reviews on sustaianbility of projects
  - 16 on sustainability of Public health/ Health promotion interventions
  - 9 on sustainability of SRH interventions
  - 4 on sustainability of medical care interventions
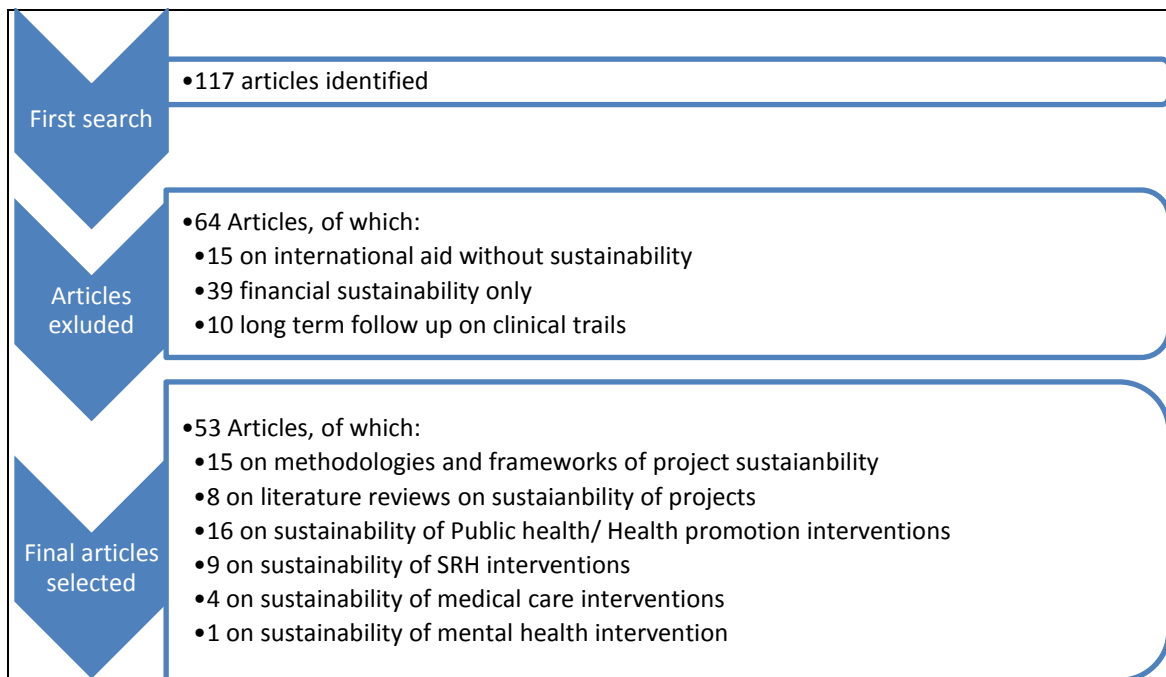 - 1 on sustainability of mental health intervention

Figure 4: Summary process of found articles

3.5   Framework for conceptualizing and measuring sustainability

The results of the literature review, the case studies and subsequent discussion of the results, was guided by the conceptual framework (figure 5) for conceptualizing project sustainability adapted from Shediac and Bones,[16] and Scheirer and Dearing.[14] The framework is a blend of the authors. Scheirer and Dearing[14] identified factors that were not in Shediac and Bones[16] findings. The reason why the fore mentioned authors frameworks was adapted is because, their frameworks were in line with the objectives of this paper. The conceptual framework consists of factors that influence sustainability and outcome factors that can be used to measure sustainability.
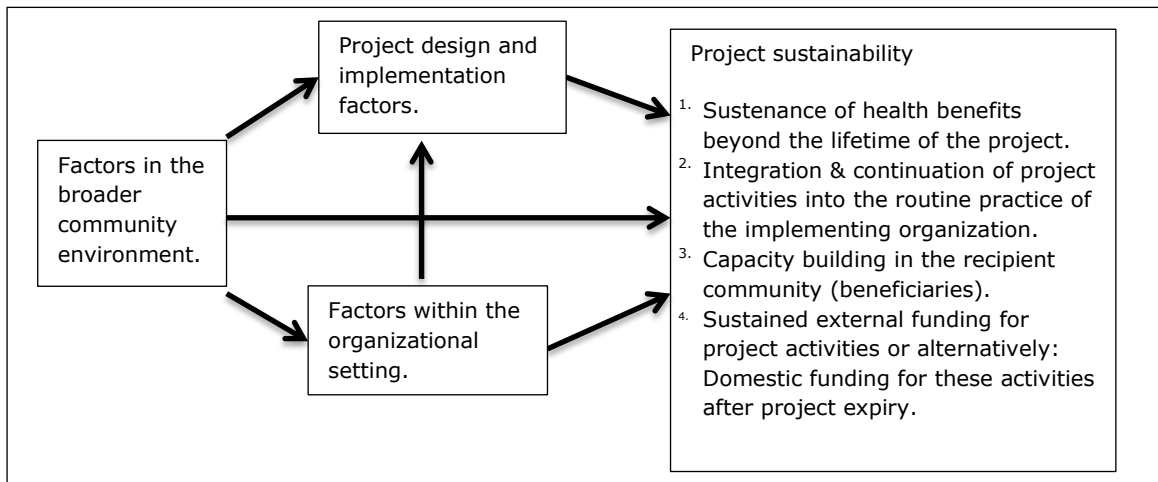
Figure 5: A framework for conceptualizing and measuring project sustainability[14,16]

3.5.1   Factors that influence on project sustainability.

The influencing factors are categorized as; project design and implementation factor which relates broadly to resources available for the project but not only financial; factors within the organizational setting which relate to organizational and managerial structures and processes; and factors in the broader community environment which refer to political, economic, environment, and the involvement of the target community members. These factors can be used as potential guidelines for sustainability planning or as a checklist for policy makers, donors, implementers and researchers.[16]

These factors can be barriers or enablers of sustainability of projects as indicated earlier. For the purpose of this paper, factors that influence sustainability were explored with the study units (FBOs and external donors). The following paragraphs elaborate more on the influencing factors.

A. Project design and implementation factors

1. Project design
   - Project approaches and goals discussed with recipient community members, as equal partners.
   - The needs of the community and or implementing organization driving the program rather than those of external donor agencies and or technical experts.
   - Negotiation or consensus-building process in place to reach a compromise for addressing everyone's (including donors, community, and technical experts) needs.
   - Project is flexible for changes during design and implementation or adaptation.
2. Project effectiveness.
   - The project expected effects or benefits with or without supported evidence.
   - Project is visible.
3. Project duration.
   - The project funding period (number of years in operation).
   - Project is new or is it an existing program that is being supported temporarily with some additional funds from an external donor.
4. Project financing.
   - The availability of source of funding for the program (internal, external, or a mixture).
   - Implementing organization and or community local resources.
   - Project is affordable (money wise) and can be implemented with local resources (example volunteers)
   - Implementing organization or the community can afford the program (able to pay maintenance and recurrent costs).
   - Strategies are in place to facilitate gradual financial self-sufficiency.
5. Training.
   - The project has a training component (professional or none professional). For project implementers and/or beneficiaries

B. Factors within the organizational setting

1. Institutional strength.
   - The type of implementing organization, how mature; developed; stable; resourceful is the organization (existing capacity and leadership).
2. Integration with existing programs or services.
   - The project is vertical or horizontal (comprehensive or integrated).
   - Project goals, objectives and approaches fit between host organization's mission and operating routines and not pre-specified.
   - The project can be integrated into the standard operating practices of its host organization.
   - The implementing organization is the recipient of program funds and not an intermediary organization.
3. Program champion or leadership.
   - The existence of a project champion to advocate for continuation.
   - The project is endorsed from the top and well supported by staff.

C. Factors in the broader community environment

1. Socioeconomic and political considerations.
   - Favorable general socioeconomic and political environment.
2. Community participation.
   - Good level of community participation (amount of involvement and types of activities).
   - The existence of partnerships that lead to nonmonetary support of the focal organization.
   - Other donors or funding potentially available in that environment.

3.6   Confidentiality

An official letter obtained from course coordinator and thesis advisor was sent to the local FBOs and their external donors explaining the purpose of the study and what kind of information we would like to obtain from them should they be willing to participate. Also, the letter assured them that, any information given would be treated as confidential and data that would be presented in the paper would be anonymous.

3.7   Study limitations

This review used a variety of data sources and search strategy to look for article, and with the different terms used to mean sustainability, may have

limited an exhaustive search for articles for the review. Studies that may have used terms of sustainability other than what was identified may not have been identified in the search process. The use of interviews as data collection method for the case studies by interviewing only project coordinators may not had generate the needed information. Other stakeholders, example community members or volunteer could have added more information such as whether they were involved in project design and implementation. Also, the interviewees may be partial or give subjective responses. This paper intended to use specific projects as the case studies where by project documents could have been used to gain more information, but it was not possible to arrange.

CHAPTER 4: STUDY RESULTS

This section first presents the results of the literature review and then the case studies in accordance with the study objectives of this paper which can be found in section (2.3).

The literature review results are presented as follows: the various definitions and dimensions of sustainability; findings on different perspectives on conceptualizing sustainability frameworks; the three categories of factors that can influence sustainability; and findings on how sustainability was measured or at least operationalized.

The literature review identified 53 studies from different fields, such as Public health, health promotion, sexual and reproductive health and rights, medical care and mental health, as indicated in figure 4. Most of the studies were done through projects with multiple implementation sites and the rest reported on projects implemented by single individual providers. The methods the studies used ranges from self-reports or interviews and some form of observations.

4.1 Definitions and dimensions of sustainability

In general, the term "sustainable" according to the Oxford English Dictionary,[35] is defined as "Capable of being maintained or continued at a certain rate or level" and "sustainability" is defined as "The quality of being sustainable at a certain rate or level".

From the health science literature reviewed, 33 out of the 53 articles did not have a definition of sustainability. Articles that defined the term sustainability, defined it in many different ways, using different term to refer to as sustainability as mentioned earlier. There is no complete consensus on the conceptual and operational definition of sustainability.[6,16,20]

Looking at the World Health Organization (WHO) website, the term sustainability is defined and used only once by the African Programme for Onchocerciasis Control (APOC). They defined sustainability as, "…the ability of a project to continue to function effectively, for the foreseeable future, with high treatment coverage, integrated into available health care services, with strong community ownership using resources mobilized by the

community and government".[36] This definition was as well indicated by Amazigo et al,[37] who used it for an evaluation of sustainability for the same programme.

The definitions of sustainability as found in the health science literature have emphasis based on different dimensions or perspectives. The terms that has been used were much geared towards the maintenance of the benefits, the continuation of the project and community capacity building. Sustainability defined in relation to health benefits over time, was directly linked to health promotion projects.[38,39] In contrast, the emphasis on continuation has led to the definition of sustainability to refer to project longevity instead of the benefits delivered which is linked to organizational change with emphasis on institutionalization, adaptation and integration of projects in to the existing systems.[40,41] Lastly, the community development dimension focuses on the capacity development of communities to maintain changes from projects implemented.

These definitions with different dimensions and perspectives on sustainability such as, sustenance of health benefits, continuation of project, community participation, has led to multi-dimensional definition of sustainability.[36,37,42] Sustainability does really present a multi-dimensional concept of the continuation process.[16] Two reasons explain this, first, sustainability is a broad term that does not restrict the survival or continuation of projects to an organizational structure, unlike the terms integration or institutionalization. Secondly, the term does not imply static projects, in contrast to institutionalization or routinization which imply static but repetitive phenomena.

In the health science literature, definitions were commonly generated by researchers themselves or cited from Shediac and Bone, and Scheirer's definition.[16,29] Both definitions stipulated varied aspects of sustainability to be; continued benefits, continued activities, and continued capacity. Parallel to the dimensions of sustainability, conceptual frameworks have come out with factors that are likely to influence sustainability. These factors are explained in section (3.5.1).

4.2   Perspectives of conceptual Frameworks

The different perspectives and dimensions in the definition of the term sustainability have been reflected in the conceptualization of sustainability. In the literature, conceptualization of sustainability has been proposed that generated two different models or frameworks with different priorities and perspectives. One form of the conceptual framework conceptualized sustainability from an intervention perspective and the other from an ecological or complex-systems perspective.

From the intervention perspective, the intervention is the main point of interest, instead of the larger system into which it is introduced. Such frameworks of sustainability tend to identify influencing factors or conditions known to facilitate the likelihood of sustainability of a specific intervention and ways to measure sustainability.[16,43] In contrast, the other models of frameworks, examined sustainability from an ecological or complex-systems perspective. Emphasis is placed on the link between broader environmental forces, contextual influences, and the intervention itself.[15,32,34] Considering the differences in the conceptualization of sustainability, there are important implications in the way research is conducted and the conclusions that can be drawn.[20] The adapted framework falls in the interventions perspective of project sustainability.

4.3   Factors influencing sustainability

Factors that can influence sustainability identified in the health science literature reviewed are categorized into the three broad divisions as mentioned earlier, which are; project design and implementation factors; factors in the implementing organization; and factors in the broader community environment. The findings of these three categories out of the 53 articles are presented below.

4.3.1   Project design and implementation factors:

Findings in relation to design and implementation factors were fairly consistent in the health science literature.

- In the design phase, 11 studies mentioned that project approaches and goals that were discussed with recipient community members, as equal partners are more likely to be sustained.

- Seven studies related sustainability to be achievable if the needs of the community and or implementing organization were driving the program rather than those of external donor agencies and or technical experts.
- Similarly, 7 studies noted that if a project was flexible for changes during the design and implementation or adaptation phases, the project was more likely to be sustained.
- Four studies identified negotiation or consensus-building process that address everyone's needs, including donors, communities, and technical experts as a sustainability factor.
- The expected effects or a benefit of a project, with or without proven evidence was identified by 9 studies as a factor contributing to sustainability. Some projects focused on interventions with known efficacy, example, breast cancer screening or smoking cessation.
- Sixteen studies reported that, the availability of continues source of funding for a project (internally, externally, or a mixture) was a sustainability factor. However, Stevens and Peikes[44] indicated that changes in an existing project to meet the priorities of new funders could lead to a loss of focus on the initial goals.
- Six studies identified project affordability in money wise and if project can be implemented with local resources such as volunteers will lead to sustainability. The use of volunteers for the delivery of services as a key strategy for sustainability was more found in public health or health promotion projects.
- A project with a training component for professional or none professional staff in its design was mentioned by 17 studies to be a sustainability factor.

4.3.2   Factors within the organizational setting:
- Institutional strength of implementing organization was mentioned by 20 studies to be a factor for sustainability of projects. There were varied institutional strengths identified such as; level of maturity; development; stability; resourcefulness of the organization (existing capacity and leadership).
- Integration of existing project or services in to an organization was another factor mentioned. 10 studies mentioned that, if goals, objectives and approaches of a project fit within the host organization's mission and operating routines would lead to

sustainability of the project. Project activities that were seen as contributing to the organization's goals were likely to receive internal support and even resources that allowed them to be sustained.[29] Furthermore, project activities that could readily fit into existing tasks and procedures were more likely to have the support of operating staff members.

- Another 11 studies mentioned that projects were sustained when they can be integrated into the standard operating practices of its host organization. Only one study mentioned that when the implementing organization was the recipient of project funds and not an intermediary organization was a factor for project sustainability.
- The presence of a project champion or leadership was identified by 15 studies as project sustainability factor. Along with this factor, 11 studies mentioned that when a project was endorsed from the top of an organization and well supported, led to sustainability.

4.3.3   Factors in the broader community environment:
- For socioeconomic and political considerations; 8 studies mentioned that favorable general socioeconomic and political environment was a factor of sustainability.
- Thirteen studies emphasized good level of community participation (amount of involvement and types of activities) as a factor of sustainability.
- Eight studies mentioned the existence of partnerships with communities or other organizations that led to nonmonetary support of the focal implementing organization as a sustainability factor.
- Two studies mentioned that, other donors or funding potentially available in that environment will impact sustainability of the project. Continued financial support was not synonymous with sustainability, but the availability of resources was hypothesized as a key influence on sustainability outcomes as indicated by Scheirer.[14]

The above factors of sustainability are not independent factors that can be implemented or tested individually. They could be seen as a group of factors that interact with each other over a period of time in project implementation to affect sustainability. Furthermore, the articles reviewed in this study points to the fact that these factors were implemented or tested differently in each context of a project and they do not influence sustainability the same way.

There was a convergence of some factors in the three categories of influences on sustainability. These factors were the most frequently mentioned or identified by the articles. They are summarized in table 1.

Table 1: Prominent factors of sustainability of projects in reviewed studies.

Category of factors	Factor of sustainability	Number of articles* cited
Project design and implementation factors	Project approaches and goals discussed with recipient community members, as equal partners.	11
	The availability of source of funding for the program (internal, external, or a mixture).	16
	The project has a training component (professional or none professional) for project implementers and/or beneficiaries	17
Factors within organizational setting	The type of implementing organization, how mature; developed; stable; resourceful is the organization (existing capacity and leadership)	20
	Project goals, objectives and approaches fit between host organization's mission and operating routines and not pre-specified.	10
	The project can be integrated into the standard operating practices of its host organization.	11
	The existence of a project champion to advocate for continuation.	15
	The project is endorsed from the top and well supported.	11
Factors in the broader community environment	Good level of community participation (amount of involvement and types of activities).	13
	Favorable general socioeconomic and political environment.	8
	The existence of partnerships that lead to nonmonetary support of the focal organization.	8

references to these articles are presented as extra information after the recommendation section of this paper.

4.4   Assessing sustainability

In relation to the conceptual framework (figure 5) adapted for this study, sustainability can be measured based on the sustenance of benefits of a project beyond the project lifetime; integration or continuation of project by implementing organization; capacity building of beneficiaries; and sustained funding from external or domestic sources. However, the literature reviewed was from a variety of study results reported in different fields and context.

Most of the studies did not differentiate the type of measure of sustainability as indicated in the framework. This makes it difficult to quantify or generalize about the extent to which implemented projects were sustained as reported in the studies. Nevertheless, there were three notable points I would like to make.

Firstly, similar to findings from a previous review by Scheirer,[29] studies that provided information about levels or extent of implementation generally indicated that partial integration or continuation of some elements or activities were more common than integration or continuation of the entire project or intervention, even when full implementation was successful in the beginning of the project. Nonetheless, in the studies that were reviewed, it was not possible to determine the benefits of partially sustained interventions on beneficiary outcomes level. Furthermore, the reviewed studies did not indicate the nature of the changes made in projects, the reasons for the changes, or the process by which decisions to discontinue elements of the project or intervention were made.

Secondly, more than half of the studies reviewed examined whether project activities were sustained. For some studies, it meant only a single question asking whether the project was maintained. Several other studies considered sustainability from the perspective of project institutionalization and measured a number of indicators as to whether full institutionalization of the project had taken place. Indeed, future studies is much needed in relation to the measurement of the extent of sustainability linking it to the specific components or activities of the project that survived or were abandoned and why.[29]

Finally, many of the studies measured sustainability over a discrete time period to see if components or activities of projects remained several years after external funding had ended. The fact that so many of them found evidence that project components or activities still existed was suggestive evidence that some form of sustainability is often possible.

4.5   Case studies

The results from the two case studies on sustainability strategies of two local FBOs and their external donors are presented in this section in relation to objectives two and three of this paper. This section is divided into two; case

study 1 results and case study 2 results. Two project coordinators from the two local FBOs in the UER of Ghana and two project coordinators from the two donors in the Netherlands responded to questions from a guided topic list (refer to annex I).

The results are presented in relation to the three categories of factors that influence sustainability indicated earlier, identifying factors that are enablers and barrier. For anonymity sake, the case studies do not indicate who the implementers and donors are. Quotes from the interview of a project coordinator of an implementer would begin or end with the abbreviation (IPC) which means Implementer Project Coordinator whilst quotes by a donor project coordinator would be abbreviated as (DPC).

The following quotes are indicative of the relevance of sustainability in the views of the project coordinators;

> "…for us, sustainability is trying to maintain the systems through governments. We do pilots at the local small field and we show the results of the pilot to the government through the District level" (DPC).

> "Yeah, for us sustainability mainly is the results; immediately and beyond. …it is the permanent or the improved behavior. So, for instance, if I am running a program, I consider it being very sustainable if I have been able to change the way people do things and improve the outcomes I am tracking over a period of time, such that I am very sure that when we leave the project community, or we are no longer meeting up with the project community, there will be a lasting behavioral change as a result of our intervention. So for us, that is sustainability" (IPC).

> "… we actually have a whole theory around sustainability. We call it the 'FIETS' [FIETS stands for sustainability at Financial, Institutional, Environmental, Technical and Social levels]. So we say sustainability is on different level and FIETS in Dutch is a bike so it's really funny but it also … it means you have sustainability on financial level, on institutional level, so more at the partner, or at environmental level and also, yeah we don't only look at -is the project gonna stay, but what does it do for a whole region; and what does it do for the partner itself; and what does it do for the environment. So we take it broad" (DPC).

The meaning of sustainability as demonstrated in the quotes above is referred to in many different ways and in different contexts. There is some recognition of the relevance of sustainability by donors and implementers but there is no uniform understanding of what project sustainability really means and what it comprises.

4.5.1   Case study 1

The results of the interviews in case study 1 are presented below as the combined views of the local project coordinator of one of the implementing organizations in UER of Ghana and the project coordinator of the donor agency in Netherlands. Their responses are presented under the following themes: Project design, Organizational setting and community environment.

A. Project design

Participants generally recognized that there are factors that are influencing project sustainability in the design phase. A question was asked about how projects proposals were generated in the design phase and this was what the IPC had to say;

> *"Yeah, already let me start from how we generate ideas…Yeah, in our dealings, you know we are a very diverse organization, with so many institutions, so many public health interventions and specialized organizations, Eye care, whatever. So, in dealing with them, with the community components being very strong, in rendering our interventions other issues come out…as the real challenges or barriers…to good health and some of the things that we do. Then they become the bases of formulation of new programs, based on evidence on the ground, or interaction with people in the community" (IPC)*

Similarly, on the part of the DPC, the same question was asked and this is what was said;

> *"…the local NGO themselves who will write a proposal to us. We first talk with them what type of work are you doing and what is your area of expertise and does it march with our values and our area of expertise, and then we invite them to write a proposal and they come up with the indicators from their region for example in Bolgatanga or in Bawku [Districts in the UER of Ghana], maternal health indicators are this low, this and this is supper low or youth doesn't have access to any SRH services... we ask them to come up with the whole*

rational, so why do you think this is the problem and what are you going to do about this and how will that influence...and also look at cultural differences and try to come up with activities that are suitable to this region. So we don't have one size fit all project" (DPC).

From the above quotes, the design of project proposals for funding started with the implementer who initiated the process with the involvement the community. The process of interactions with the community may pave the way for the community to become part owners of the project. The role of the donor in this case was to buy into the designed project with a sense of direction of their own values and area of expertise.

Other influencing factors of sustainability in project design identified by the participants include;

- Duration of projects was mostly three years. However, the IPC acknowledged that the important thing was the long term of partnership that existed with the donor. From the donor perspective, the duration of a project depended on the availability of fund to support the project implementation.
- When they project has training component at different levels was identified by both implementer and donor to be an influencing factor;

"Yeah sure, for every program that we do, for every proposal, there is a component of training. Either to those who implement it directly, or to very high level staff to undertake training somewhere, short trainings, if in their work. But some of them too are competence based trainings. For instance, if you are dealing about the whole issues of maternal health and there are issues of quality of care, then obviously you need to input capacity building at that level, to ensure that the services that you render are of a certain quality. So capacity building are key to all our programs" (IPC).

"...it depends on the type of programme because sometimes you don't need to train but most of our programmes in deed have capacity building because it's really something that [donor] does is building capacity of local community members and that is also for us a way of sustainability. So you train for example like here they trained community based volunteers, they trained peer educators, they trained health staff. So at different levels" (DPC).

- When there was flexibility to change activities if the need be; and
- The integration of the project into the existing structure of the implementer. However, on the part of integration, the implementer and donor had a slight different view. The implementer's view on integration was using their existing structures. On the donor's point of view, integration of projects can be difficult because of the lack of funds but however added that;

> "…this capacity building…this community structures, they will stay, so if they can continue monitoring them or…do the monitoring under different project you still have a structure that will stay instead of…yeah when the project stops from now the whole programme stops" (DPC).

B. Organizational setting

Enabling factors of sustainability in the organizational setting that were noted by the IPC included: 60 years of experience gave them credibility and a foundation to partner with other organization; availability of infrastructure such as office space and vehicles; community presents; and strong human resource:

> "…you don't always have to hire new staff because basically we can get staff who can fit for all kinds of programs, that is long term sustainability" (IPC)

On the part of the DPC, they were ready to influence enabling factors of sustainability if they were present or absent in the organization;

> "…what we do is we ask them if they went through an organizational capacity assessment…some organizations are doing that and [the donor] is also doing that…for example how is the financial management or how is the management structures and decision making process but also sustainability. So we for instance ask them if they went through such assessment if not we like to integrate it in to the project. If we found a new project we also say ok at the end of the project or in the middle of the project we do an assessment so you can get like learning points out of it and then you can work on that. So we also like not strengthen the community but also we like to strengthen the capacity of the partner itself" (DPC).

Responses to barriers of project sustainability in the organizational setting were identified by the IPC and DPC. The IPC noted that; there was the tendency of slow attitude by staff who were on government salary towards their work; documentations, research and publications had not been done very well; some staff were resistant to changes and innovation, which may be as a result of routines that have not changed for a long time and for this the IPC noted that;

> *"Obviously people [staff] become too glued to what they are used to be doing, such that, innovation again becomes a problem, you need to be equipping people [staff] along the line, to be able to do that [adapt to innovations]" (IPC).*

The DPC on the other hand noted as that;

> *"I think barriers within an organization can be staff or capacity of staff in the organization" (DPC).*

The DPC among other things was able to identify possible barriers to sustainability from project reports;

> *"...if we see that the financial reports are not ok or the narrative reports are not ok, you can say may be there is a lack of capacity within the organization to report or may be also to implement" (DPC).*

C. Community environment

With regards to enablers and barriers of project sustainability in the community environment, the respondents noted them specifically relating to the context in which they operated.

The IPC and DPC both unanimously responded to the same enablers which were that; communities were willing to participate in projects that were implemented; the availability of community volunteers was strong in their responses, which was indicating a good level of community involvement. However, the IPC added that, health volunteers were doing a lot at the neglect of their own financial wellbeing;

> *"For example, you take health volunteers; these guys are running, doing everything mobilizing communities at the neglect of their own economic survival. I must say that without the active involvement of the community we are going nowhere, with all the interventions that we do" (IPC).*

Similarly, both DPC and IPC identified the same barriers of project sustainability such as; issues of culture and perceptions, myths about health product or health services that were rendered. These were more specific to SRH projects.

4.5.2   Case study 2

Prior to the interviews, the researchers' interactions with the project coordinators of the implementer and the donor indicated some resent development related to their positions. The DPC stated that;

> *"I have taken over since May [2015], so I hardly know the partners. I can only give general answers of a mere impression that I have over the years on sustainability" (DPC).*

In addition, the DPC stated that;

> *"We worked with [FBOs], we were not happy with their performance, leave alone with their sustainability…we don't have other faith based partners anymore…" (DPC).*

Likewise, the IPC had resigned prior to the interview but had not handed over yet at the time of the interview.

The results of the interviews in case study 2 are presented below as the combined views of the local project coordinator of one of the implementing organizations in UER of Ghana and the project coordinator of the donor agency in Netherlands. Their responses are also presented under the following themes: Project design, Organizational setting and community environment.

A. Project design

Participants responded to a question about how projects proposals were generated in the design phase and this was what the DPC had to say;

> *"…they design it themselves…also with the communities. It is their responsibility to involve them...some organization do not involve the community" (DPC).*

However, the DPC added that;

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"Let me add this, some time they hire consultants to write the proposal, even we [donor] do that as well. You know like youth proposal they are very difficult to write. You need specialist to guide you because of the tone or the language. We do hire consultants to write. I suspect that they also hire consultants to write" (DPC).

The IPC responded similarly about how projects are generated;

"We designed it from here because of the field work that we went…we saw the need for it [the project]. The community involvement was the land acquisition and then if there is any communal labour…people came out to dig and all that. So the community, they were involved" (IPC).

Generally, the design of projects begins with the implementer, who initiates and involves other stakeholders such as the community in the process as indicated in the above quotes by the IPC. On the part of the donor, they were in support of projects that were designed by the implementer with the involvement of the stakeholders.

Other factors that were identified by participants include; when the project is flexible to modification; and when project had a training component.

B. Organizational setting

Factors of sustainability in the organizational setting that were noted by the IPC included; the established health facilities with good staff base gave them the opportunity to implement projects; availability of infrastructure; community partnership where the health facilities and the communities form a board to help address issues that may arise; and partnership and advocacy with other stakeholders:

"We have used this [a project] to advocate for other organizations especially the District Assemblies. What we tell them is that if this is coming from outside [external donors], so what is the District doing? As a result of this, some District Assemblies have put up staff quarters in some of our facilities " (IPC).

On the part of the DPC, what was normally considered enabling in the organizational setting were; capacity of the staff; community involvement; when there is good financial management to be able to manage funds of the project, and the ability to report.

Responding to barriers, the DPC noted that,

> *"Many NGOs (Faith based and non-faith based) are lost in small IGAs [income generating activities] that cost more in funds (and time) than that they give profit. Moreover, NGO –minds and business-minds are different. Especially [some FBOs] have a charity mind as compared to non-faith based organizations"* (DPC).

Other barriers the were noted from the interviews were; lack of staff capacity and lack of organizational capacity.

C. Community setting

In response to enablers of sustainability in the community setting, the following were indicated by both respondents as their views; communities were willing to take part in projects that were implemented example, proving land for development; a good socioeconomic and political climate were noted as well as the existence of a peaceful environment (no wars).

In relation to barriers, respondents indicated that; sociocultural issues such as cultural believes, values and norms were sometimes barriers; and issues related to socioeconomic example is poverty.

CHAPTER 5: DISCUSSIONS

5.1 Definitions and dimensions of sustainability

A high proportion (62%) of the articles reviewed did not present a definition for the term sustainability. There is no agreed definition of sustainability of projects from the literature reviewed. Definitions that were available, defined and used the term sustainability in many different ways and in many different contexts.[6,16,20] The reviewed articles definitions were focused on the continuation of a project after the end of the funding period. This makes it difficult for researchers to study sustainability and have the conclusions generalized when the level of continuation, for example the whole project or aspects of the project should be continued was not so clear. There is therefore the need for a clearer definition of the term sustainability of health projects that could guide implementation science research in the future.

Drawing from this literature reviewed, the following suggested factors may be considered in defining sustainability in terms of health project implementation to guide our further research:

1. The extent to which the core elements of the project could be maintained (elements that are closely associated with desired outcome of health benefits)[14,45];
2. The extent to which desired health benefits were maintained or improved upon over time after initial funding or supports had been withdrawn;[46]
3. The extent, nature, and impact of modifications to the core and adaptable elements of the project;[14,45] and
4. The exact continued capacity to function in order to maintain the desired benefits (type of resources available that was used in the maintenance).

The different ways of defining sustainability presented three outcome dimensions of sustainability which were; the maintenance; continuation; and capacity building of beneficiaries of a project when the funding comes to an end. These dimensions of sustainability outcome were not presented in the studies showing the extent of sustainability or at what level it was indicative of sustainability. The above discussed factors that may be considered in the

definition of sustainability may be considered in the assessment of the three dimensions of sustainability in the future.

5.2 Perspectives of conceptual frameworks and factors influencing sustainability

According to Fox[32] the process of selection or construction of a relevant theoretical framework involves a lot of effort by researchers. It is very important that the use of frameworks is made explicitly clear, not only in the construction, but also to help shape the skills of new researchers. From the review, there were two types of theoretical frameworks that emerged; the intervention perspective frameworks and the ecological or complex-systems perspective frameworks. This finding indicated that the development of conceptual frameworks for the study of health project sustainability was yet beginning. To advance in the development of sustainability frameworks, the type of project and the context within which it was implemented should be considered. This is similar to Scheirer[6] view, who stated that research about sustainability needed to consider the nature of the intervention to be sustained. She argued that "Health-related interventions may differ in their likelihood of sustainability and in the factors likely to influence continuation", thereby suggesting a framework for the analysis of sustainability of 6 types of intervention which included;

1. Those implemented by individual providers;
2. Programs requiring coordination among multiple staff;
3. New policies, procedures, or technologies;
4. Capacity or infrastructure building;
5. Community partnerships or collaborations; and
6. Broad-scale system change.

Scheirer's[6] argument of studying sustainability by looking at the type of intervention may be right. It could be true that not one factor can influence sustainability the same way in different contexts or interventions, for example, political factors identified as an influencing factor as suggested by Fox et al[32], may not influence sustainability of intervention implemented by individual providers or a community-based coalition. Although some projects may have similar characteristics that may be influenced by a single factor, categorizing these characteristics and types of projects will clarify the thinking and research about factors that can influence sustainability.

In our literature review, the most profound factors (table 1) that can influence sustainability identified relate to the three categories of influencing factors of the adapted frameworks of Shediac and Bone,[16] and Scheirer and Dearing[14] which are; factors that can influence sustainability in the design of the project; in the implementing organization setting; and in the broader community environment.

The profound sustainability influencing factors in the design and implementation phase of a project were found to be influenced by a coherent set of factors primarily related to;

1. Whether or not the project has a training component for professionals or non-professionals among the project implementers and/or beneficiaries;
2. The source of funding for the project, be it internal, external, or a mixture; and
3. Whether or not the project approaches and goals were discussed and agreed upon between the implementing organization, the donor and the project beneficiaries (recipient community members), as equal partners.

Fewer than half (13%) of the studies identified influencing factors in the design and implementation phase relating to when needs of the community and or implementing organization were driving the program rather than those of external donor agencies and or technical experts; when it was flexible for changes to be made during the design and implementation or adaptation phases; and when negotiation or consensus building process that address everyone's needs, including donors, community, and technical expert's as a sustainability factor as indicated earlier in the results.

In the organizational setting, influencing factors that were identified in the review were as follows;

1. The type of implementing organization in terms of how mature, developed, stable, resourceful the organization was relating to the existing capacity such as staff and leadership leads to sustainability;
2. When project goals, objectives and approaches fit between host organization's mission and operating routines;
3. When the project can be integrated into the standard operating practices of its host organization;

4. When there was in existence a project champion to advocate for the continuation; and
5. When the project was endorsed from the high management and well supported.

The importance of leadership and staffing was shown by the fact that close to half of the studies that examined influences on sustainability mentioned it, alongside the importance of a champion, a person who is within an organization to advocate and motivate the rest of the staff and stakeholders who need to belief in the benefits of the project for the continuation of project.

Factors that influence sustainability in the broader community environment in the literature reviewed related to the following;

1. The existence of a good level of community participation (amount of involvement and types of activities);
2. Favorable general socioeconomic and political environment; and
3. The existence of partnerships that lead to nonmonetary support of the focal organization.

Based on the review, it may be difficult to generalize the influencing factors of sustainability of health projects. There is some limitation in the tools use in the reviewed literature to collect data for the study of sustainability, for example, studies that used self-reports or surveys did not include the specific details of the activities or components of a project that was sustained. The other reason may be that there was not enough funds allocated for research for the study of sustainability so, researchers turn to rely on less costly tools for data collection. There is room for improvement in the tools used in data collection for the study of project sustainability such as, the use of information technology systems, trained observers and visits to implementing sites to conduct multiple informant interviews. Future research on sustainability and its influences may be conducted based in the intervention type, employing specific methodologies.[6,14]

5.3 Assessment of sustainability

The difficulty in quantification or generalization of the extent to which implemented projects were sustained as reported in the studies may be as a result of the lack of an explicit theoretical framework to guide the studies of

project sustainability. Indeed, many of the frameworks that are available have not been evaluated.

There is more to improve in the methods that are used to measure project sustainability. As earlier mentioned, instead of asking questions in a study to measure sustainability of which self-reports may be imprecise, or the use of indicators to measure the level of institutionalization, other forms of methods may be used. The development and use of less costly and time intensive methods such as; observation, community or beneficiary score cards, monitoring strategies and most importantly, when all these methods information can be triangulated may give a better measure of the extent of sustainability of a project.

5.4 Case studies

The case studies are divided in to two sections namely; the perspectives of the project coordinators on sustainability; and their perspectives on enablers and barriers of sustainability. The discussions also looked at their similarities and differences relating to the factors.

5.4.1 Perspectives on sustainability by project coordinators

Generally, the relevance of sustainability was recognized by the project coordinators from their views about the meaning of sustainability. There were sustainability strategies that were taken into consideration in project design and implementation from the three categories of factors of sustainability. Also, there were some forms of dimensions of sustainability such as; system change; behavior change; maintenance of financial, institutional, environmental, technical and social changes. These dimensions are in line with the three dimensions indicated earlier but they were not categorized accordingly to what was found in the literature reviewed.

What was revealing was that, some strategies of sustainability existed and some were documented and used as a guide by some implementers and donors whilst some only use them in their work not documented.

5.4.2 Perspectives on enablers and barriers of sustainability

A. Perspectives of IPCs

Regarding enabling factors of sustainability, the two implementer's project coordinators similarly identified project design factors such as;

- When project ideas were generated by the implementing organization through their interactions with stakeholders mostly communities. According to them, the likelihood of projects been sustained was when stakeholders were involve in the design and implementation, which is in line with the reviewed studies.
- Other similarities were; when there was training component in projects; flexibility of project to modification and integration of project into existing routines of their organization.

Training and flexibility was not seen as factors in some projects such as buildings. There were no differences in the views of the IPCs regarding project design. Barriers that were identified were; lack of community involvement in project design and implementation; and also a possible barrier could be if there was a consultant hired to write the project, whose ideas would be put in the project?

In the organizational setting, similar enablers that were noted by the IPCs related to; their years of existence and collaboration with other stakeholders; the availability of infrastructure; community presence; integration of projects; and adequate human resources. There were also no distinct differences except one implementer used external funded projects to advocate for development from the local District Assemblies.

Barriers in the organizational setting were; lack of staff involvement, lack of staff capacity; resistance of some staff to innovations and change; and lack of organizational capacity. These finding were similar to the reviewed studies.

Community enablers that were similarly noted were; communities were willing to participate; and the use of community volunteers to implement project activities. Barriers that were identified were; cultural norms and believes. Cultural norms and believes as a barrier to sustainability did not come up in the reviewed studies, which may mean that it is context specific.

B. Perspectives of DPCs

From the DPCs views, enablers that were noted in project design were similar to the above enablers noted by IPCs. There were no differences in the factors identified.

In the organizational setting, enablers that were identified by DPCs were again similar to those identified by the IPCs. What was distinctly similar by DPCs was financial management capacity of the implementer as an enabler.

Differences were that, one implementer used organizational capacity assessment to identify enablers if they were present and if absent they build the capacity of the organization. Barriers that were identified were also similar to the IPCs. What was different among the DPCs was that, one identified 'charity minds' of some FOBs as a barrier to sustainability.

In the communities, enablers identified by DPCs were again similar to the IPCs. What were similar among DPCs were community participation and the use of volunteers as enablers.

Relating to the finding of the review and the case studies, there were a lot of similarities in the three categories of influencing factors of sustainability. The differences from the case studies findings were the barriers identified; the sociocultural issues such as norms and beliefs and the 'charity mind' of some FBOs.

Considering the approach to sustainability by FBOs and their donors, the generation of project ideas by the implementing organization and the involvement of stakeholders including; communities, volunteers and staff in the design and implementation of projects among other factors were their very strong which can lead to project sustainability. This is because, evidence from the review showed that, projects are more likely to be sustained if the project ideas were generated by the implementing organization. The weakness of their approach may come from when unplanned changes are made in the position of project coordinators. New project coordinators will find it difficult in adjusting to strategies of sustainability.

5.5   Conclusions

This paper studied the available literature about the sustainability of health projects in order to understand what has been learned to date about this complex topic. Case studies were also done on implementers and donors of externally funded health projects to learn about sustainability strategies that have been considered in the designing of projects.

In the review, the term sustainability was defined and used in many different ways and in different contexts. There is no consensus in the definitions and theoretical conceptualization of sustainability of health interventions. The reviewed studies showed a convergence on profound influencing factors

(table 1) related to the three categories of the adapted framework thus; factors in the design and implementation; factors in the implementing organizational setting; and factors in the broader community environment. These influencing factors may not be the same in different context and sustainability is not achieved by a single set of influencing factors.

Few studies had measured the extent to which health projects benefits or outcomes were sustained. Most of the studies indicated sustainability of some project activities or some integration.

In the case studies, FBOs and donors did consider some sustainability strategies in the design of their projects and implemented some of them such as community involvement in project design and implementation; use of community volunteers to implement project activities. There were some forms of dimensions of sustainability. The influencing factors noted by FBOs and donors were similar to the finding of the review. What was different was barriers of sustainability such as cultural norms and believes noted by FBOs and 'charity minds' of some FBOs noted by donors.

In sum, there is paucity of evidence of sustainability of health projects but local project sustainability may be possible, under the right internal and external influencing factors. More studies are needed on sustainability.

CHAPTER 6: RECOMMENDATIONS

This paper is recommending the following for local implementers, external donors, and researcher who may have an interest in enhancing sustainability of health projects.

6.1 Implementers at the local level:

For project planning and design stage, to increase the likelihood of project sustainability, implementers may adapt the following:

- The planning for sustainability should be encouraged early in the design of a project, taking in to consideration the findings of this paper on influencing factors of project sustainability in the design and implementation stage, particularly if the project is not a research to test the effectiveness of a new intervention.
- Choose projects and interventions that relate strongly to the implementing organization's mission and culture, involving all level of management and staff from the beginning. This may ensure support from upper management and staff, and tasks needed to implement the project will be factored into the workloads of available staff members.
- Identify and support a project champion who will take a leadership role in both initial project planning, development and implementation, and the subsequent integration and continuation of the project deliverables and sustainability.
- Formulate sustainability strategy documents to guide them in planning, designing and implementation of projects.

6.2 External donor agencies:

Funding agencies with interest in sustainability may be able to influence long-term outcome of projects by doing the following:

- Implementing organizations should be encouraged to plan for sustainability early in a project design and implementation phase. This can be done by identifying factors that can influence sustainability with the local implementer in their own context.
- Funding of projects in implementing organizations should be done along with some capacity building to support them. If a new organization is implementing a project, time and resources should be

allowed for capacity building, identifying and working with local champions to provide the leadership and the knowledge that local organizations need to keep a project going over time.

- Funders should support studies of sustainability even after the initial program funding is terminated, including data collected to assess the continuation of benefits for intended clients. Simply inquiring whether the program continues to exist does not address whether it continues to provide the same scope or types of activities or the same extent of benefits for clients.

6.3 Researchers and policy makers:

Finally, researchers and policy makers interested in sustainability may consider the following:

- The conceptual frameworks used for studying sustainability of health interventions calls for a further development of theoretical conceptualization and operationalization of sustainability and the factors that influence it. This may be done using the work of Scheirer,[6] there by linking sustainability frameworks to the type of intervention implemented. Testing of conceptual frameworks should be encouraged in other to strengthen the outcome of sustainability research.
- Methods used in studying sustainability should make greater use of methods that may reduce potential bias in findings, such as observation, community or beneficiary score cards, monitoring strategies and most importantly, when information from all these methods can be triangulated may give a better measure of the extent of sustainability of a project.
- Policy makers should consider sustainability in the design and formulation of policies, programmes and projects. this can be done taken into consideration community participation and involvement, capacity building of organizations and staff among other facts of sustainability at all levels

Extra information
* References to table 1 articles: (14–17,19,20,24–26,28–30,32,37–39,41–44,46–60)

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ANNEX I: INTERVIEW GUIDE

Guided Interview questions

For implementing project coordinators

1. What does sustainability mean to your organization?
2. What are the factors (enablers/barriers) that influence sustainability in your organization?
3. What factors (enablers/barriers) are there in the broader community that influence sustainability?
4. What do you consider as factors (enablers/barriers) of sustainability in your project design?
5. The history of the relationship between the recipient and the donor: Was this particular project a one-off project between the donor and the recipient? Or was it just one activity that was part of a much bigger package of projects that have been implemented over a much longer period in UER?
6. How successful have been you project implemented so far in terms of sustainability?

For donor project coordinators

1. What factors (enablers/barriers) do you conceder to influence sustainability in the implementing organization?
2. What factors (enablers/barriers) do you conceder are there in the broader community that influence sustainability?
3. What did you consider as factors (enablers/barriers) of sustainability in the project design?
4. Was this particular project a one-off project between the donor and the recipient? Or was it just one activity that was part of a much bigger package of projects that have been implemented over a much longer period in UER?
5. If so, how 'embedded' was this project into the long-term collaboration between donor and recipient?

The table below was used as a guide as well for follow up questions.

Project coordinators of implementers	Project coordinators of external donors
A. Project design and implementation factors	
1. Project design	1. Project design

- Who came up with the project idea - How did the project idea conceived - Who was involved in the conception - Who was involved in the design phase - How were negotiations or consensus build with communities and donors? - How flexible was the project to change during design and implementation 2. Project duration - How long was the project - Was the project new or it was an existing one that was funded 3. Project financing - where was the source of funding - internal, external or mixed 4. training - what kind of training was in the project - for implementers (professional / none professional 5. Project effectiveness - What evidence is there to support the effectiveness of the project? - How visible was the project	- Who came up with the project idea - How did the project idea conceived - Who was involved in the design phase - How were negotiations or consensus build with implementers? - How flexible was the project to change during design and implementation 2. Project duration - How long was the project - Was the project new or it was an existing one that was funded 3. Project financing - Was there other source of funding - internal, external or mixed 4. training - what kind of training was in the project - for implementers (professional / none professional 5. Project effectiveness - What evidence is there to support the effectiveness of the project? - How visible was the project
B. Factors within the organizational setting	
1. Institutional strength - Was your institution capable enough to handle the project? How about the donors? - Has the project helped strengthen the org. setting or expose weakness? How? 2. Integration with existing	1. Institutional strength - Was the recipient institution capable enough to handle the project? - Has the project helped strengthen the org. setting or expose weakness? How? 2. Integration with existing

programs/services • How fit was the project goals, objectives and approaches with the host mission and operating routines • How was the project integrated in to the organizations routines • Who received the fund from donors 3. Project champion/leadership • Who is the leader or a champion of the project? • How was the project endorsed from the top management	programs/services • How fit was the project goals, objectives and approaches with the host mission and operating routines • Was the project integrated in to the organizations routines • Who received the funding of the project? 3. Project champion/leadership • How was the project endorsed from the top management of the host?
C. Factors in the community environment of project site	
3. Socioeconomic and political considerations. • How favorable was general socioeconomic and political environment. 4. Community participation. • What was the amount of involvement • What types of activities were they involved. • In what way has the project helped the community? • What form of partnerships exist that led to nonmonetary support of the focal organization. • What other donors or funding potentially were available in your environment.	1. Socioeconomic and political considerations. • How favorable was general socioeconomic and political environment. 2. Community participation. • What was the amount of involvement • What types of activities were they involved. • In what way has the project helped the community?