



**THE INSTITUTIONALIZATION OF THE UNIVERSITY THIRD
MISSION:**

**A COMPARATIVE STUDY BETWEEN ADDIS ABABA AND JIMMA
UNIVERSITIES, ETHIOPIA**

BY

MULUKEN NIGATU BEKELE

**A DISSERTATION SUBMITTED FOR THE DEGREE OF DOCTOR OF
PHILOSOPHY IN INTERNATIONAL AND COMPARATIVE
EDUCATION**

SUPERVISORS: DENNIS BEACH (PROFESSOR)

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COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES
CENTER FOR COMPARATIVE EDUCATION AND POLICY STUDIES
PhD PROGRAM IN INTERNATIONAL AND COMPARATIVE
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Abstract

Besides the traditional missions of research and teaching, 'the University Third Mission' (UTM) has recently become a major policy concern for universities. As a result, universities are increasingly engaged in a broad range of UTM activities and expected to act as a key contributor to the economic and social wellbeing of their countries and regions. However, there are suggestions from recent national and international research that UTM is not given equal value as teaching and research, which are prioritized, with UTM coming in a distant third, almost as an afterthought. Universities are being criticized for this and their lack and improper use of UTM budgets, for the unfavorable attitude of faculty members towards UTM, and for unfavorable conditions of work and poor logistics for faculty to work on the activities of UTM. The assumption behind the present dissertation is that these problems relate to a lack of proper institutionalization of the UTM and the aim of the research is therefore to assess this process of institutionalization. A comparative investigation in two Ethiopian public universities was conducted. The first is the Ethiopian flagship university (Addis Ababa University) and the second is also among the first generation higher education institutions of the country (Jimma University). Two basic questions were posed: (1) How is UTM described in the national policies context? (2) How is UTM institutionalization at Addis Ababa University (AAU) and Jimma University (JU)? The second question has 5 interrelated specific questions: (i) How supportive is the institutional orientation of AAU and JU towards UTM? (ii) How supportive is the institutional support of AAU and JU towards UTM? (iii) How do the community partners view their involvement in UTM? (iv) What is the current status of teachers' involvement in UTM? (v) What similarities and differences are there in institutionalizing UTM at the two universities? To answer these questions, a mixed research methodology that applies an exploratory sequential method was employed to guide the research process. Institutional theory has been used as a lens to guide this study. Data were mainly collected using semi-structured interviews, document reviews, and questionnaires. An official from the Ministry of Science and Higher Education, officials from the two universities, community partners, and teachers from both universities were participants of this study. The Policy and strategic documents at the national and universities' levels were also reviewed. While purposive sampling was used to identify the participants of the interview and documents for review, proportionate stratified sampling was used to identify teachers from both universities. The analysis of the study is mainly guided by the study's analytical framework. While the qualitative data were narrated under the analytical framework of the study, a single sample t-test was used to analyze the quantitative data. After the analysis, the quantitative data were made fit into the analytical framework and discussed together with the qualitative data. Based on the analysis and discussions, it was found that though the national policies recognize the importance of UTM, lack of emphasis for the mission and profound problems on conceptualizing the mission were found. When it comes to the universities, even though they integrated UTM in their mission statement, there are inconsistencies and discrepancies in defining the mission. While both the universities have developed some important policy documents, they fail to create a common understanding on what should be counted as UTM at their universities. Both universities were found to have activities categorized under the three core dimensions of UTM, however, these universities could not put clear distinctions among these dimensions. The leadership and support of the universities were found to lack devotion to: creating a strong partnership with the external community, building common understanding and value on the stakeholders regarding UTM, assigning proper budget, and so on. The community partners' involvement in UTM was also found to be limited. The

communication between the university and the community is more of a one-way (university-dominated) communication. Teachers in both universities were also found to have low participation in the activities of UTM in general and technology transfer in particular. Generally, even though there are minor differences in the process of institutionalizing UTM in Addis Ababa and Jimma Universities, the process is immature in both universities. Hence, suggestions are forwarded to further institutionalize UTM in these universities. Among the suggestions is creating a common vocabulary for UTM. It is suggested in this research that starting from the national level to the levels of the universities, clarity, and consistency in conceptualizing the UTM should be given priority. This should also be followed by creating a common understanding and value for all stakeholders.

Key words: the University Third Mission, Institutionalization, Institutional Support, Institutional orientation,

List of Acronyms and Abbreviations

AAU:	Addis Ababa University
B-HERT:	Business/ Higher Education Round Table
CBE:	Community Based Education
CE:	Continuing Education
ESDP:	Education Sector Development Plan
EQA:	Education Quality Assurance
ETP:	Education and Training Policy
E3M:	European Indicators and Ranking Methodology for University Third Mission
FDRE:	Federal Democratic Republic of Ethiopia
GTP:	Growth and Transformation Program
HERQA:	Higher Education Relevance and Quality Agency
HESC:	Higher Education Strategy Center
HSIU:	Hailesilassie I University
IP:	Intellectual Property
IPR:	Intellectual Property Right
JU:	Jimma University
MoE:	Ministry of Education
MoSHE:	Ministry of Science and Higher Education
NPC:	National Plan Commission
OECD:	Organization for Economic Co-operation and Development
STI:	Science, Technology and Innovation
TBI:	Technology Business Incubation

TBIC: Technology Business Incubation Center
TGE: Transitional Government of Ethiopia
TTO: Technology Transfer Office
UNESCO: United Nation Education and Scientific and Culture Organization
UTM: University Third Mission

CHAPTER ONE: INTRODUCTION

This chapter deals with the background information of the investigation. But it also makes a clear statement about the research problem by drawing attention to the missing gap. It also states the research objectives, the research questions, and identifies the significance and the scope of the study. In addition, key terms are defined and the organization of the current research is presented.

1.1. Background of the Study

Dating back to the 19th century Humboldtian ideal of universities, teaching and research are the two traditional missions of higher education institutions that evolved in response to the needs and opportunities of an emerging modern scientific era (Zlotkowski, 2005). Yet, the model of the Humboldtian University was, as also Sylvia (2002) shows, a development of the mid-19th century and with the change to knowledge-based societies it has become outdated (Roessler, Doung & Hachmeister, 2015). New demands have developed that shape the way professors, students, and administrators interact and in addition to (traditional) teaching and research, a so-called University Third Mission (UTM) has emerged (Laredo, 2007) with much stronger attention on the interaction between civil society, business enterprises, and universities. This new mission is often summarized under the umbrella term of the “Third Mission” (Rinne & Koivula, 2009; Roessler, Doung & Hachmeister, 2015).

There are several general definitions of the UTM. It can be defined as an engagement in non-academic activities (activities other than teaching and research) (Molas-Gallart et al., 2002), or as opening Higher Education Institutions to the community (Sam & van der Sijde, 2014). The UTM is also defined in the policy documents, briefly as community engagement (B-HERT, 2006) or

service to the external community (OECD, 2007). However, UTM has different names in different universities. These include, but not limited to Community outreach, community service, or community engagement are some of the most common (Mugabi, 2014).

The discussion about the UTM has increased since the 1980s. This is primarily due to growing globalization, complex changes in the economic, political, and social context of higher education (Castells, 1996). With the diminishing political and economic importance of the state, HEIs found themselves in a new position (Sporn, 1995). State funding is declining (Altbach, Reisberg, & Rumbley, 2009) and the criteria for funding are changing (Santiago et al., 2008). These facts made universities to look for alternative ways of getting funds and generating income. In line with this, economic theories such as the Entrepreneurial University, Triple Helix (Etzkowitz & Leydesdorff, 2000), or the approach of Mode 2 (Gibbons, et al., 1994) became the languages of Higher Education Institutions in most of the countries in the world. All these theoretical concepts share the basic idea that there should be increasing links and exchanges between Higher Education Institutions and society and business enterprises which paves the way for the conceptualization of the University Third Mission (UTM).

However, at the heart of UTM is similar to the two traditional missions of the university- discovery, development, transfer, and application of knowledge. Thus, UTM in many contexts is conceptualized as activities that occur in the context of teaching and research without being teaching and research alone (Pasternack et al. 2015). Accordingly, as used in this thesis, even though UTM is a mission attached to the research and teaching missions, it goes beyond these two missions of the university, involves stakeholders outside the academic sector; and relate to socio-economic developments (Nedeva, 2008; Henke et al. 2016).

The University Third Mission includes three broad dimensions of activities: technology transfer, continuing education (CE), and social engagement (Carot et al., 2012; E3M Project, 2012) that intentionally “take resources and expertise of a university to off-campus locations and bring the public or subsets of the public onto the campus” (Beere et al., 2011:14).

The first dimension of the University Third Mission (Technology Transfer) manifests itself through the establishment of Technology Transfer Offices (TTOs) and legislation for the commercialization of research and Intellectual Property Rights (IPRs). The commercialization of research through TTOs, spin-off enterprises, business incubators, science parks, and the institution of IPR mean that universities can perform entrepreneurial activities to help economic performance as well as their own financial advantages (Zewude, 2010; Molas-Gallart et al. 2002).

The second dimension of the University's Third Mission is Continuing Education. Although the *raison d'être* for the establishment of continuing education centers has been differently justified for different universities, they share similar goals. This joint goal is defined as: “Contributing to the development of the cooperation of the university with the public and private sector and international institutions through the execution of short and long term education-training programs in the fields of interest and research other than the ones on which taught courses are given, both at undergraduate and graduate levels, and development of various consultancy projects”(Arslan, 2008: 140). More specifically, continuing education, as a dimension of UTM is a modality of education that focuses on short-term trainings that target adults who have received initial education and the completion of it does not lead to degree awards. Its main aim is to help individuals update their knowledge and skill and enhance their efficiency in their career and life in general (Mugabi, 2014; Tissot, 2004; CEDEFOP, 2008; Jarvis, 1995).

The third dimension of the UTM is the social engagement dimension. This dimension entails that universities make contributions to government and civil society as well as the private sector, assisting not only with economic performance but also helping to improve quality of life and the effectiveness of public service (B-HERT, 2006). The core idea here is that UTM the intellectual capital concentrated in universities should be used to strengthen social and civic capital. The objective is an empowered public, working effectively at the local level through local associations and mediating institutions, armed with a sense of civic purpose and tools of social, economic, and political analysis (Pineiro, et al., 2015).

Accordingly, social engagement involves a different approach from the traditional one-way university outreach activities. This includes, but not limited to the participation of the external community in the teaching-learning activities of the university, involvement in key decision-making processes and making the resources (facilities) of the university ready for the community's use (Mugabi, 2014).

Hence, UTM is not only about the university impacting on the wider economy and society through the generation of research-based innovation. It is also about the university itself experiencing impacts through changes in funding and organizational structures. These changes call for a re-orientation/re-definition of the role of higher education institutions (Molas-Gallart et al. 2002).

In Africa, a call for the reorientation of the role of higher education institutions had already been started in the years from the late 1950s to the early 1960s. This was the period when several African countries had gained independence. Their presidents made strong pleas for the recognition of African scholarship and an orientation towards community needs in line with

indigenous African beliefs and values. In 1961, Nkrumah inaugurated the University of Ghana with a speech drawing on the history of education in Africa (Cleaveland, 2008). Nyerere, who made a plea to African universities to get rid of their ‘ivory tower’ mentality and contribute to society, echoed the message in 1963, saying:

...let us be quite clear; the University ... has a very definite role to play in development in this area, and to do this effectively it must be in, and of, the community ... The University of East Africa ... must direct its energies particularly towards the needs of East Africa ... it's in this manner that the university will contribute to our development ... In this fight, the university must take an active part, outside as well as inside the walls. (Nyerere, 1963, cited in Mwaikokesya, 2012: 23)

In the same vein, the role of a university for societal change was emphasized by Hailesilassie-I in his speech during the inaugural ceremony of Hailessilassie I university (now Addis Ababa University) in 1961. He stated:

...the fundamental objective of the university must be the safeguarding and the developing of the culture of the people it serves.... the immediate and practical aim of this university is to educate the Ethiopian youth and to prepare them to serve their country...in all countries of the modern world, special competence is required to deal with the advancement of agriculture, industry, commerce and civil service... diligence is demanded in developing the university as rapidly as possible to meet the compelling needs of our empire...while laying great stress on education for our younger citizens, we should not forget the obligation and the opportunity which the university has with respect to the older citizen. As we study the plans and projects of this university, we are pleased to see that much attention is being given to the extension of its usefulness to the entire population, in the form of extension courses and lecture. Hailesilassie I University should attempt to serve every qualified citizen who is willing and able to avail himself of the resources of the university and do the required work. (Cowan, O'connell and Scanlon, 1994: 303)

As can be seen, Hailesilassie I had urged the university to extend its services beyond the walls of the university to the development of the culture of the Ethiopian people. So, for Africa, the

UTM was also a way of contributing to the development of indigenous knowledge systems to acquire a better understanding of local knowledge for knowledge production that is relevant to African contexts (Oyewole, 2010).

The effort towards creating more engaged Higher Education Institutions was further reinforced in 1962 during the UNESCO conference at Tananarive, Madagascar. The focus of the conference was on " the development of higher education for social and economic transformation". The conference was specifically aimed at promoting the Africanization of African universities through the ownership of the curriculum and management, and by serving national (local) and regional development needs through treating pressing societal problems (Preece et al., 2012).

According to Amare and Sellamna (2015), Ethiopia started integrating the third mission in Higher Education Institutions' missions in the 1950s. Since then, the higher education institutions in Ethiopia are increasingly required to recognize the social and economic difficulties of the country and make themselves part of the society and the solutions for its problems (Teshome, 2003).

Different reforms have been made on the current Ethiopian higher education institutions since 1994. There has been a series of new policies which led to major changes in these institutions. The Education and Training Policy, which was declared in 1994, was the first framework for systems reform and transformation. This policy emphasized the importance of higher education for the country's development. It has further been explained in the policy document that higher education serves as a research and development laboratory and a mechanism through which the

nation builds its human capital to enable it to actively participate in the local, national, regional, and global economy (TGE, 1994).

The first Ethiopian Higher Education Proclamation was enacted in 2003 and then followed by a revised version in 2009. In this revised proclamation, particularly, on its fourth and sixth objectives, higher education engagement with the community is duly emphasized. These objectives require the higher education institutions of the country to be more responsive to the countries pressing societal problems.

The Education Sector Development Program (ESDP) V (2015) and the second Growth and Transformation Plan of the country (GTP II) also emphasizes the need for positive university-community engagement through various means, including research that can respond to national and institutional priorities and development plans. These documents urge the Higher Education Institutions of the country to produce competent graduates who have appropriate knowledge, skills, and attitudes in diverse fields of study and who can produce research that promotes knowledge and technology transfer based on national development and community needs. These documents have also urge universities to create effective linkage with industries so as to transfer knowledge and make learning more relevant (FDRE, NPC, 2016; MoE, ESDP V, 2016).

With this background in mind, this study tries to investigate how the University Third Mission has been institutionalized in two prominent Ethiopian public universities, Addis Ababa and Jimma Universities.

1.2. Statement of the Problem

The current discourse in the higher education institutions is that there are three fundamental missions for any higher education institutions: Teaching and learning, research, and the Third

Mission, and the third Mission activities are supposed to be essential to most effectively achieving the overall purpose of the university (UNESCO, 2015). It is also believed that pedagogy, discovery, and access to higher education are all enhanced when universities are committed to their third mission (Cooper, 2005).

However, according to Strum et al. (2011), in most of the universities of the world, the third mission has historically not been and in some places, it still is not generally given equal value as teaching and learning and research missions of the higher education institutions. These scholars also believe that in many cases, too much attention is placed on research, teaching, or both research and teaching, with the third mission becoming an afterthought. In the same vein, Waghid (2012) adds that even if the functions of teaching, research, and the third mission are interrelated and that one function on its own cannot fully represent the core functions of the university, there is no equal concern of these functions in most universities of the world.

In African universities, though there are some efforts towards the agenda of this third mission, these efforts are generally fragmented and lack the usual organization and systematic means to be considered as institutionalized (UNESCO, 2015). Even if most of the universities in Africa have organizational structures in place to promote the third mission activities (Mugabi, 2015). These universities have not yet fully integrated the third mission into their budgets, teaching, and learning, and research activities (Ntseane, 2012; Preece, Ntseane, Modise, & Osborne, 2012). Mugabi (2014) states that funding for the UTM in African universities is largely sporadic, insufficient, or dependent on foreign funding sources and that, most of the third mission activities are initiated by individuals or groups of faculty members and are thus less institutional but more personal in nature. Mugabi's further explanation depicts that, it has also been studied that in most of the African universities, faculty hiring and promotion practices either ignore or

insufficiently recognize faculties' third mission activities. Even in few universities where the third mission is among the criteria for faculty hiring and promotions to senior academic positions, few points are allocated to faculty engagement, and service to external communities (Ntseane, 2012; Mugabi, 2014)

When it comes to Ethiopia, even though universities in the country are urged to open their doors and try to work on the pressing societal problems (MoE, 2009), like their African counterparts, Ethiopian universities are being criticized for showing scant concern regarding their third mission (Deuren et al, 2013; HESC 2006; Amare and Sellamna, 2015; AAU, Framework for Community Engagement, 2017).

Studies conducted by Amare and Sellamna, (2015) and Deuren et al. (2013) on Ethiopian universities reveal that lack and improper use of budget for community service, low community service skills by faculties, unfavorable conditions of work, and poor logistics for faculty to work on community service are common problems in the universities. These findings are in line with what the Ethiopian Higher Education Relevance and Quality Agency (HERQA) has found out. For instance, in its 2009 publication series on Institutional Quality Audit report, it states that the community service activities (Third Mission) in Addis Ababa University is generally messy for which a clear document cannot be found. It states:

The HEQA team has concluded that while there are wide ranges of community services provided by the University, systematic record and documentation of staff endeavors is not yet part of the University culture. There is no information on outreach undertaken by faculties, institutes or departments and during the audit visit gained no further documents to indicate that the University is active in this area... Even though documented information was not accessed, from discussions with staff, the EQA team has learned that staff members are involved in various

kinds of consultancy activities which are independent of the University system.
(HERQA, 2009: 50)

In the same vein, HERQA evaluated Jimma university's Community outreach activities. In its report, it acknowledges that the efforts of Jimma University towards community outreach is noteworthy. However, it identifies the weakness of Jimma University regarding consultancy services (one wing of the UTM). It states the weakness as follows:

...Regarding consultancy service, on the other hand, although it is stated as one of the main duties of the Research and Publication Committee to render consultancy service to the community, as stated in JU's research policy, what is so far done is insignificant and simply paper work. It has been found out that the consultancy service rendered did not go beyond the service rendered to staff and students of JU. (HERQA, 2009: 53)

Hence, I argue that all the above mentioned problems related to the UTM can be attributed to lack of the proper institutionalization of the mission and that studying the institutionalization of UTM is like unlocking the main gate to grasp almost the whole problem related to this mission.

To this purpose, I tried all possible ways to search for prior studies regarding the institutionalization of UTM in Ethiopian universities. However, except the study done by Amare and Sellamna (2015) on the community service aspect of the UTM, a research work that primarily deals with issues of UTM in Ethiopian universities could not be found, let alone the institutionalization of it. A research conducted by Deuren et al., (2013) focusing on analyzing the achievements and challenges of Ethiopian higher education roughly highlights that even if there are some community service activities in the new universities of Ethiopia, there is a lot left for these universities to do on their third mission.

There are also few prior studies (Abreham, 2016; Abdu, 2013; Banbul & Sintayehu, 2017; & Association of African Universities, 2012) with a focus on university-industry linkage (one indicator of the UTM). The findings of these researches depict that the linkage between the university and industry is generally ineffective in the Ethiopian context. Other thesis works done by Habtamu (2016) and Asnake (2016) focused on the concept of the entrepreneurial university, where they generally found out that the entrepreneurial university model is immature in Ethiopian Universities.

This research is, therefore, different due to two main arguments: First, unlike the above discussed studies, it is not aimed at investigating the implementation (practice) of UTM. Rather, it focuses on investigating the way UTM has been institutionalized in universities. This aim has emerged from the strong argument that if this mission (UTM) had been well institutionalized at the universities, the aforementioned problems related to UTM could have not been found. Second, studying a particular aspect of UTM cannot bring an enduring solution to the problem. It would be like a painkiller. Rather than providing a cure, it only gives temporary relief. With this argument, the present study is conducted at two public universities: Addis Ababa University (AAU) and Jimma University (JU). Addis Ababa University is the oldest and the flagship University of Ethiopia. Jimma University, on the other hand, is an emergent university considered to be an active university on the UTM (engaged university) (Sijde, Popma, & Tushune, 2012). Accordingly, this research assumes that by comparing the two universities, the lesson could be extracted regarding the UTM in Ethiopian universities. In what follows, I forward two basic questions to be answered by this research:

1. How is UTM described in the national policy context?

2. How is UTM institutionalized at Addis Ababa University (AAU) and Jimma University (JU)?

2.1. How supportive is the institutional orientation of AAU and JU towards UTM?

2.2. How effective is the institutional support of AAU and JU towards UTM?

2.3. How do the community partners view their involvement towards UTM?

2.4. What is the current status of teachers' involvement in UTM?

2.5. What similarities and differences are there in institutionalizing UTM at the two universities?

1.3. Objectives of the Study

The general objective of this study is to explore the institutionalization process of UTM at Addis Ababa and Jimma Universities. In this regard, this study assesses the national policy context vis a vis UTM, explores the institutional orientation of the universities towards UTM, uncovers the institutional support of universities towards UTM, and investigates faculties', and communities' support for and involvement in UTM. Finally, the comparison is made on the similarities and differences of the institutionalization process of UTM at these two universities in order to extract the lesson from the strengths and pinpoint weaknesses in the universities' journey of institutionalizing UTM.

1.4. Significance of the Study

This study has the following significance: First, it is anticipated to contribute to HE research on, and academic knowledge about, the institutionalization of UTM in universities by broadening the existing literature and analytical tools. Second, the findings and recommendations of this research benefits the two universities' effort towards institutionalizing UTM, if not yet

institutionalized properly. Third, this study is also expected to contribute to the betterment of existing policies of UTM in universities of the country through providing relevant recommendations. Fourth, it may also be useful for other universities in the country because public universities in Ethiopia share a number of common characteristic features such as governance and organizational structures.

This study is also useful for the discipline of international and comparative education in two ways: First, as it deals with higher education (one of the focuses of the discipline), it expands the existing literature and empirical studies in the theme. Second, as the research is comparative in its design, it may serve as one area of focus for another researcher in the discipline.

1.5. Scope of the Study

The concept of ‘institutionalization’ has several connotations and definitions, although all of these have at least one point in common – they agree that institutionalization is an ongoing process in which a set of activities become an integral and sustainable part of a formal system. In order to study the process of institutionalization, scholars in the area suggest different indicators (Furco, 2001, 2009, 2010,; Gelmon & Seifer et.al., 2005; Kesches & Mullyaert, 1997). This study is delimited to four broad indicators of the institutionalization process of UTM: National policy context, Institutional orientation, Institutional support, and stakeholders’ buy-in towards UTM. Furthermore, even if UTM has three mutually inclusive dimensions, technology transfer, continuing education, and social engagement (Carot et al., 2012; E3M, 2012), this study does not explore the practices of each dimension at Addis Ababa and Jimma universities in depth. However, the main focus would be on exploring how this UTM has been institutionalized at these two universities. In doing so, the focus will be on the above mentioned four indicators of the institutionalization of UTM.

1.6. Definitions of Key Terms

i) Community

Attached to Higher Education Institutions, the term ‘community,’ refers to “a group of households or organizations ranging from governmental offices to an NGO, such as a school, clinic, hospital, church or mosque or as a part of the university itself (Hall, 2010: 23). For the purpose of this study, ‘community’ refers to local governmental offices, schools, nongovernmental organizations (NGOs), and groups of local citizens with whom the two universities under the current investigation engage.

ii) Community Service

Community service is unpaid work that benefits people and organizations in the community. It could mean helping out at a nonprofit agency, volunteering for a special project in schools or other institutions, or doing something positive to improve the situation in a community. Related to universities, community service is a one-way process in which the university works for the betterment of the local community.

iii) Community Engagement

Therefore, unlike community service, which emphasizes a one-way process of transferring knowledge and technology (Kellogg Commission, 1999) from universities to external communities, CE underscores partnerships and recognizes that external communities also have knowledge and other resources from which universities can benefit. Thus, herein, the term ‘community engagement’ is used to denote a two-way interaction between universities and external communities.

1.6. Organization of this Dissertation

This dissertation is divided into ten chapters. Following this introductory chapter is chapter two, which presents the review of related literature. Some related topics are reviewed in this chapter. The third chapter describes the theoretical, conceptual, and analytical frameworks of the study which mainly guides the whole process of the study. The fourth chapter is the methodology of the research, where the design and methods of the research are discussed. Chapter five discusses the national policy context vis a vis UTM. Chapter six and Chapter seven deal with the institutionalization of UTM at Addis Ababa and Jimma Universities, respectively. Chapter eight discusses the comparison of core results from the two cases. Chapter nine is a general discussion on the core findings of the study. Finally, chapter ten discusses the conclusion and implication of the study.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

This chapter is organized into three sub-sections. The first is a brief introduction to the University and its missions. It involves a literature review and aims to provide a general overview of the missions of the university. The second aims at clarifying the conceptual issues regarding the broad concept of UTM and the third presents the theoretical orientation of the thesis.

In undertaking the literature review, I used both manual and automatic (internet-based) searches. In the manual search library catalogs were assessed in order to find books in print form and books were found from both Addis Ababa and Gothenburg (Sweden) universities. Regarding the internet-based search, I used the library of Gothenburg University's super search (all citation indexes) and subject-specific searches (Higher Education) for papers from the year 1990 (Boyer's seminal work) to 2018, particularly for the discussion on UTM. Moreover, Google Scholar, ERIC, MEDLINE, and TAYLOR & FRANCIS online were used. Search terms were chosen to reflect the core concept. The search was conducted in December 2018 using a keyword combination. Duplicated references were filtered out, and only English language literatures were retained.

2.1. The University and Its Missions

According to Verger (1992), the modern term university has been derived from the classical Latin word, *Universitas*, which means "the totality" or the "whole." In the medieval times, *Universitas* had been a general term used to denote all kinds of community or corporate such as guild, a trade, a brotherhood, and so on. Gradually, *Universitas magistrorum et scholarium* ("the university of masters and students") stands for organized communities of individuals, who were

responsible for higher learning and study (Sintayehu, 2018). However, "defining a university is not an easy task, especially in this era of differentiation in higher education, with new and diverse institutions emerging everywhere" without explaining the common functions, purposes, and values (Altbach 2006: 104). Hence, it will be good to understand higher education or a university in terms of its purpose and/or missions. What is relatively possible to do is to explain the common tasks of higher education and a university as they have something to do with education and scholarship through teaching, research, and public services.

2.1.1. Teaching

Historically, the purpose of higher education/university was to produce "a learned clergy and a lettered people" (Rudolph, 1962: 6) and to develop learners to work towards improving the conditions of society at large (Dewey, 1916). In line with this, Clark (1983) states that the earliest medieval universities in Europe, established mainly through religion, were designed as teaching institutions to diffuse and extend, rather than to advance, knowledge, thus, creating some of the organizational features evident in the contemporary universities.

The development of the modern university as the primary organizing model for teaching has a rich history. In the early years, two models of the university emerged: one at Bologna, mainly focuses on students who paid their instructors and had a good deal of power over them, and the other at Paris, where the instructors had significant power over their learners and maintained a very formal structure, where there is apprentice (undergraduate), journeyman (bachelor), and master levels of education (Perkin, 2005). Over time, the Paris model of the university came to prove that it has many advantages over the Bologna model. Still, instructors have maintained control over the organization of learning experiences in higher education worldwide. In almost all over the world, faculty decides the curriculum, pedagogy, and assessment methods, albeit

with various difference in how they deliver these responsibilities. In short, the primary mission of the medieval European university was the preservation and transmission of knowledge, through teaching (the first mission) (Cooper 2011).

2.1.2. Research

As the quest for learning expands, universities have transformed and expanded their roles and mission from a simple transfer of knowledge to searching, generating, and applying knowledge (Sintayehu, 2018). The medieval mission of the university - transmission, and training - has been coupled with knowledge generation. University search, production, and dissemination of knowledge have become universal. The inspiration of the traditional university, as an institution that was promoting liberal education, has been challenged by the transformation of the university into a more research-centered, professionalized, and specialized modern university (Fuller, 2003). According to Kerr (2001), by the 19th century, the medieval university that was formed by a sole community of masters and students has become a large institution of diversified roles, personnel, and activities that are held together by a common name and related purposes. Diversified departments, libraries, institutes, laboratories, researchers, scientists emerged and developed in a university. Modern science replaced moral philosophy and research emasculated the status of teaching. In the nineteenth and first half of the twentieth century, several developing university systems and institutions were consistently serving the elite and national culture as part of territorial consolidation. The result was that universities have become ivory towers and exercised high status because they were considered as educating the best social and intellectual members of the nation (King, 2004). However, the Enlightenment and the emergence of rationalist approaches in Europe reinforced the notion of the university as the center of science. The rise of the Humboldtian Research University in Germany in the

nineteenth century added the significant function of knowledge creation to that of teaching and professional training

2.1.3. The University Third Mission

As discussed above, the emergence of Humboldtian model had synergistically connected teaching and research (King, 2004). Subsequently, higher education institutions have attached their missions with a wider variety of social interests and developed a wider sense of responsibility to the wider society than simply serving a small fraction of intellectual inquiry alone. In the same century, access to higher education considerably increased all over the world. In the United States, the Congress enacted the Morrill Act, which created land-grant universities, linking higher education to a predominantly agrarian society and expanding agricultural research by higher education (Fisher, Fabricant & Simmons, 2004; Wergin, 2006). The Morrill Act, in America, developed land grant institutions to assist with the agricultural, mechanical, and technological changes affecting the mission of public service (third mission) (Boyer, 1997; Thompson & Lamble, 2000). These developments paved the way for the notion of the University Third Mission (King, 2004).

2.2. Conceptualizing the University Third Mission

In the history of higher education, which began as a history of individual institutions with local connections and passed through periods of nationalization, expansion, the establishment of university missions, and the rise of the mass university in the late 1900s, many community-university relationships have been established, but most commonly in the form of community-based research and service-learning opportunities (Beere, Votruba& Wells, 2011). Community-based research was described as academic research directly involving the community to address a specific issue facing the community. Service-learning referred to an educational experience for

students to serve in the community and report on their experiences in a classroom setting (Bringle & Hatcher, 2004). As higher education was called upon to increase its collaborative efforts for the benefit of society, new and innovative types of community-university partnerships have been created involving an array of university and community stakeholders (Boyle, Ross & Stephens, 2011). As discussed above, historically, the third mission had been implemented as one-way communication in which academic experts transferred their wisdom to the masses (Creighton, 2006). More and more, UTM has become a multidimensional approach, containing cultural and social as well as political and economic dimensions. It is fair to say that UTM has become “a matured additional mission of universities” (Benneworth & Zomer, 2011:98). In general, UTM can be seen as an umbrella term for all HEIs activities that are directed towards society and activities in which the attention lies on civil trends, needs, and requirements.

The term UTM covers all those requirements that ask universities to play a much more visible and stronger role in the design of modern knowledge societies by providing socially, culturally, and economically usable knowledge (Vorley & Nelles, 2008:120). These kinds of activities had been applied in the UK in the eighteenth century with the provision of technical education for working people and professionals by the mechanics institutes. Mechanics institutes in the eighteenth century were aimed at addressing societal needs by incorporating fundamental scientific thinking and research into engineering solutions. The school revolutionized access to education in science and technology for ordinary people so as to transfer knowledge (technology) (Walker, 2012).

In general, UTM is considered to be the activities concerned with the generation, use, application, and exploitation of knowledge and other university capabilities outside the academic environment (Molas-Gallart & Castro-Martínez 2007). This is in addition to universities’ two

traditional ‘Humboldtian’ missions of academic research and higher education (Rolfo & Finardi 2012).

However, the academic literature on UTM is still emergent and its basic terminology is not yet fully established. At the moment, there are three interpretations of the concept of UTM (Molas-Gallart & Castro-Martínez 2007). One is associated with a third source of income or a third stream of revenue related to knowledge transfer and licensing intellectual property rights (IPR) (Meyer & Tang, 2007). Another explanation of UTM associates it with direct activity for the commercial exploitation of universities’ resources and research through licensing, consulting and advisory services, and spin-out firms. A third interpretation is associated with societal outreach. Other terms that relate to, overlap with, or are enveloped by UTM are ‘valorisation,’ ‘(technology) transfer,’ ‘third role’ and ‘third stream’ (Wedgwood 2006; Srinivas & Viljamaa 2008; Laredo 2007). Among these terms, valorization and technology transfer focus on one dimension of interaction, i.e., the commercial exploitation of research results.

For this thesis, the concrete categorization from the European Life Long Learning Programme-funded (E3M project 2012 & Carot et al., 2012) is adopted. Accordingly, UTM is categorized into three dimensions: 1) continuing education; 2) technology transfer and 3) social engagement and dialogue with the society through consultancy, expert advice, public debate (Molas-Gallart et al. 2002; Laredo 2007; E3M 2012).

2.2.1. Continuing Education

The idea of continuing (further) education was first started in Great Britain with the establishment of mechanics institutes. According to Walker (2012), the mechanics’ institutes

movement in the UK was a success that provided a firm foundation on which continuing education was established by the beginning of the twentieth century. Walker went on to explain that although the movement initially ‘failed’ to support adult working-class education, its ultimate success was due to mechanics’ institutes responding to the needs of industry (for the working-class people). These mechanic institutes introduced courses for adults in the evening classes, at both elementary and advanced levels, and qualifications which supported employers’ needs in making a crucial contribution to industrialization (Walker, 2008).

Continuing education offered by the universities is a means for opening access to the community to use the resources that reside in the university (Schejbal and Wilson, 2008), with this extending the resources of the universities into the communities they serve. Smith and Bender (2008) also state that continuing education units are critical for helping to improve the quality of life of the people in the communities that they serve.

2.2.2. Technology Transfer

A focused definition of universities’ technology transfer has emerged in the last twenty years, perhaps with origins in the Bayh-Dole Act of 1980, an amendment to the United States patent code. This legislation enabled U.S. universities to claim ownership rights in intellectual property arising from research funded by the U.S. Government. Accordingly today, technology transfer in the universities is generally understood to refer to the commercialization of university research results and is defined as the transfer of university-owned intellectual property rights (IPR) to industry for commercial application and public benefit (Rasmussen et al., 2006). This notion is also observed in the organizational structure of universities, as most universities have established technology transfer offices (TTOs) to specifically manage and coordinate the activities associated with the commercialization of their research (Thursby, et al. 2001). These increased

commercialization efforts have also been supported by policymakers. This transfer of knowledge can be done through different channels. Few of these include: University-Industry linkage, commercialization of knowledge, academic patenting (Etzkowitz et al., 2000; Plewa & Quester, 2007, Debackere & Veuglers, 2005).

2.2.3. Social Engagement

Universities' knowledge (and technology) transfer strategies and activities are focused mainly on the industry. Socially oriented knowledge transfer activities are in general captured under the heading of 'social engagement' (Olsen, 2007:55), which accordingly "involves a very different posture from (we do it to them) outreach" (Carot et al., 2012: 42). According to Mugabi (2014), Social engagement includes:

...the involvement of external communities or their representative in the teaching and learning activities of a university (through activities that enhance the educational experiences of students) as well as the sharing of university facilities with the public. It also includes the involvement of communities or community representatives in the decision-making processes of a university—for instance, having external representatives on administrative and/or academic boards of the university. Social engagement, then, occurs through (a) formal activities, such as field attachment, field-based learning, the involvement of external communities in the decision-making processes of the university and the sharing of the space, facilities, and services of the university with the public and (b) informal activities, such as active involvement in activities of associations, religious groups. (p. 104)

This "social engagement" could be fulfilled with the help of six dimensions: 1) civil engagement, 2) community outreach, 3) community service, 4) service-learning, 5) social

entrepreneurship, and 6) widening participation (Berthold, Meyer-Guckel, & Rohe, 2011: 23-41).

2.3. Summary of the Conceptualization of UTM

To sum up, UTM encompasses three core dimensions: continuing education, technology transfer, and social engagement. Each dimension has some specific activities that give a clear picture of the three dimensions. Hence, the institutionalization of UTM, as aimed in this paper, would be based on this conceptualization. The following table summarizes these dimensions of UTM.

Table 1. Illustration of third-mission activities

Category	Possible Indicators
Continuing education (Outreach)	<ul style="list-style-type: none"> • Human resources • Access to knowledge and resource
Technology Transfer	<ul style="list-style-type: none"> • Contracts with industry • Contracts with public bodies • Intellectual property • Spin-offs • Dissemination
Social engagement and dialogue (Community Engagement)	<ul style="list-style-type: none"> • Participation in policy making • Involvement in social and cultural life • Public understanding of science • Consultancies • Voluntarism

Source: Compiled based on Laredo (2007; E3M, 2012),

2.3. Relationship between Teaching, Research, and Service (UTM)

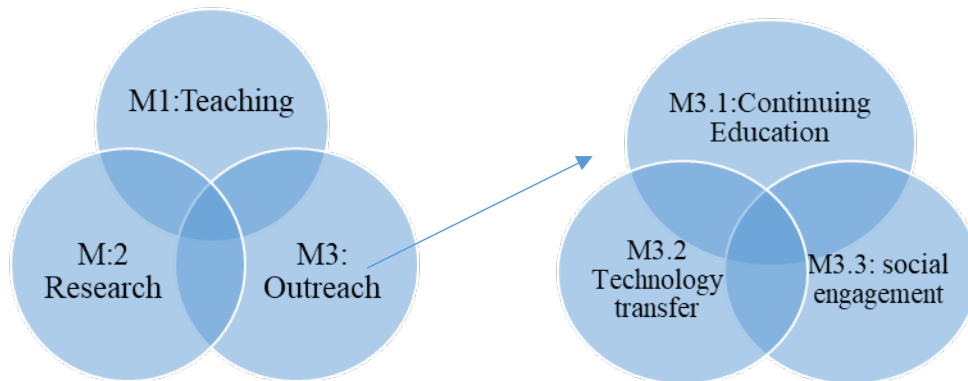
The history of higher educational institutions indicates that the dilemma of how to have a balanced approach to education has never really been addressed either by the education administrators or by the policy makers of the institution (Khan, 2015). The addition of research as one core university mission necessitated acceptance of compatibility and even complementarity with traditional teaching (Geuna, 1999). However, some authors suggest that

this relationship is not apparent. Some propose a positive relation between teaching and research (Colbeck, 1998), others show a negative relationship (Barnett, 1992) and some deny any relation (Marsh & Hattie, 2002).

When the third mission emerged, the literature focused on the analysis of its relation with research and teaching activities. However, just as teaching and research have become integrated, it seemed logical that the third mission should be similarly incorporated (Etzkowitz, 2004). It has been argued that engagement in university-industry relations produces high-quality research output (Etzkowitz & Leydesdorff, 2000) because these activities have complementary effects. Study of the relationship between the first and the third missions is rare and the literature provides no clear evidence on it. Etzkowitz, (2004) argues from a theoretical point of view that there is a strong interconnectedness among research, teaching, and consultancy.

The Integrated Tripod Mission, including teaching, community service, and researching, is a crucial mechanism for driving technology transfer to the outside(Keerati-angkoon, 2015). The knowledge and experience gained from research and teaching should be carried to solve any problem in the community with a maximized benefit to the economic development of the country's regions (Etzkowitz, 2004). This entails that while there is room for the three missions to overlap, the third mission serves as a thread that weaves all the three missions into a unified whole(Siegel et al., 2004). Figure 1 below shows this interrelationship. After the theoretical lens is discussed, this model will be upgraded to be used as the conceptual framework of the study.

Figure 1: The Interrelationship among the missions of the university



Source: David (2018)

2.4. Benefits of the University Third Mission

The University Third Mission is a vitally important component of any university's role, whether it is pictured as a third mission or as integral to the core missions of education/teaching/learning and research/scholarship. It is as important for the university in countless ways as it is for society (E3M, 2012). Cooperation between universities and enterprises is to be supported because those interactions are, on the one hand, vital to ensure a better match between alumni and the need for human resources in the economy and, on the other hand, for developing the potential for new economic aspects. This could be done through the commercialization of knowledge, spin-offs, and patents. The technology transfer activity of universities is believed to strengthen the innovative power of the country (Thorn & Soo, 2006).

The University Third Mission can also be seen as an opportunity to transfer knowledge. Philipp Laredo, who created indicators (radar) of Third Mission elements when he worked on the "Prime Project Observatory of the European University (OEU)", suggests many benefits. His radar contains eight dimensions: 1) human resources (the transfer of knowledge through graduates that later work in public services or in the industry), 2) intellectual property with a focus on patents

and other codified knowledge, 3) spin-offs which help to transfer knowledge through entrepreneurship, 4) contracts with industry with a knowledge circulation between universities and enterprises, 5) contracts with public bodies, which is similar to 4), but does not focus on industry, 6) participation into policy making in the form of giving expertise, 7) involvement in social and cultural life with universities' own facilities (such as orchestras or museums), and 8) public understanding of science, which is meant in the sense of interacting with society (Laredo, 2007: 8-9). In this understanding, the focus of The UTM lies on the question of how university members can transfer their tacit knowledge into society (David, 2003).

Another benefit of UTM can be seen from the social engagement perspectives. Through voluntarism, and opening the resources of the university to the wider community, the university can engage in the social and cultural life of the community (Olsen, 2007).

2.5. Critique of UTM

The articulation of UTM has emerged since the 1980s because of global pressure on universities to play a more central role in the knowledge economy (Venditti et al., 2011). The concept of UTM is somewhat ambiguous. Yet basically, it refers to varied activities not covered by the first mission (education) and second mission (research) such as technology transfer, continuing education and social engagement in the form of public access to lectures and cultural assets, voluntary work, and consultancy, and so on (E3M Project, 2012). From this perspective, the term 'social contribution' is a useful term for describing the core notion of UTM.

The university has a long and reputable history of engaging with and contributing to society. For example, the US land grant system was created in a sense with an explicit 'third mission' in mind (Martin, 2012), with universities expected to contribute to the surrounding community and

agricultural economy by shaping research agendas in accord with local needs (Mowery et al., 2004). Martin (2012) also argues that many medieval universities were in fact expected to contribute to both economic and cultural development. The articulation of the term 'UTM' and the birth of the entrepreneurial university should therefore be viewed more as an expansion or accentuation of previous expectations (Saunders, 2010). Saunders further states that yet what is new in the university's recent evolution is the magnitude of the contemporary forces seeking to align the creative powers of the university with economic development. Consequently, the idea of societal contribution is today widely perceived and promoted as being chiefly an economic contribution (Vorley & Nelles, 2008; Yusuf, 2007).

This shift in focus from society to the economy may be observed in many spheres, both inside and outside the academy. As argued by Vendetti et al. (2011), the OECD, in particular, has tended to focus discussions concerning the third mission and societal contributions to technology transfer activities encompassing patenting, licensing, and creation of spin-off firms and technology parks. Especially over the last decade, this organization is going to great lengths to emphasize economic benefits and gains in international competitiveness for governments when universities focus their third stream activities on innovation transfer and spurring regional development (OECD, 2007).

Due to its focus on revenue generation, a neglect of the humanities at the expense of revenue-generating fields of applied sciences has been signaled (Canaan & Shumar, 2008; Slaughter & Rhoades, 2004; Washburn, 2006), with others identifying a breakdown of shared governance norms and the spread of market-logic driven, corporate-style management across academia (Bleiklie, 2007; Rhoades, 2005; Saunders, 2010). Jensen and Thursby (2001) have also produced evidence to suggest that many technology transfer offices are prioritizing profit over

widespread diffusion of scientific inventions. Others expressed concerns about the deterioration of the traditional culture of open science as the assertion of IP rights threatens the efficiency and economic logic of the scientific commons' or the common pool of scientific knowledge (David, 2003; Heller & Eisenberg, 1998; Mowery et al., 2004; Nelson, 2004).

2.6. The Position of the Researcher

Due to the increasing pressure on the universities to be responsive to the ever-growing needs of society, entertaining the agenda of UTM seems to be unavoidable. However, the arguments against UTM are important for the universities to take them seriously and try to avoid prioritizing profit over long-term societal benefits. In this regard, Clark (1998:139) suggests that universities should avoid the “shopping mall effect” by focusing on the benefits for the society and using the additional fund which may come from the different activities of UTM be used to further reinforce the bond between the university and the community. This may refer to cross-subsidizing other relevant but not necessarily profitable areas; flourishing of the university's infrastructure (i.e. library, lab); attracting high profile staff, and financing innovative researches from students and the faculty (Habtamu, 2016). Hence, I believe that strengthening UTM in the universities of Ethiopia should be given attention, but this should not happen by compromising the very aim of the universities, which is engaging with and contributing to society.

2.7. Higher Education in Ethiopia

This sub-section is organized into two main topics: First, a brief description of higher education in Ethiopia will be presented. Here, the historical development of higher education in Ethiopia and the contemporary situation would be presented very briefly. The second topic deals with a brief history of the University Third Mission in Ethiopia.

2.7.1. A Historical Glance at Higher Education in Ethiopia

Ethiopia is a multilingual and multicultural country that constitutes more than 80 nations and nationalities. The country has a federal structure with nine regional states (Afar, Amhara, Benishangul-Gumuz, Gambella, Harari, Oromiya, Somali, Southern Nations, Nationalities, and Peoples' Region, and Tigray) and two city administrations (Addis Ababa and Dire Dawa). It is the second most populated country in Africa next to Nigeria. The country is located in the horn of Africa and it is divided into nine regions and two administrative cities. The capital city, the largest city, is Addis Ababa (Abebew, 2014).

Although Ethiopia possesses a 1,700 years of tradition of elite education linked to Orthodox Church (Girma, 1967), 'modern' higher education was initiated only in 1950 with the establishment of the university college of Addis Ababa. The university college had less than 1,000 students and less than 50 teachers in the late 1950s and most of the teachers were foreigners (Teshome, 2004). In the next two decades, six specialized technical colleges were established to address training needs in agriculture, engineering, public health, and teacher education and with the assistance of Former Soviet Union assistance (Teshome, 2004). Ethiopia established its first Polytechnic Institute at Bahir Dar in 1963 (Bishaw and Melese, 2007). It was giving training in agro mechanics, industrial chemistry, electricity, textile technology, and wood technology. In 1961, most colleges were reorganized under Haile Selassie I University (Marew, 2000).

The long informal association of education with the Ethiopian Orthodox Church has influenced the pedagogy of higher education institutions in the country (Teshome, 1990). In the academic organization, there were somewhat more American and less British, than in the former colonies of East Africa. Strikingly, tertiary enrolment totaled only 4,500 in 1970 out of the national

population of 34 million. The resulting tertiary enrolment ratio of 0.2 % was among the very lowest in the world. The skilled human resource available to generate and guide development in one of Ethiopia was, therefore, very small in relation to the enormity of the task (Pankhurst et al., 1990).

Hence, the need for reform started to emerge in 1964 by the decision to require 1 year of community service of university students prior to graduation. This was aimed at bridging the gap between the educated elite and the large community. In other words, it was aimed at making the education of the country more relevant to the needs of the society. However, these incipient reforms were shortened by political events (Teshome, 1990).

A socialist military coup overthrew the government of Emperor Haile Selassie I in 1974 and established a regime known as Derg. Instantly, the name of the university was changed to Addis Ababa University (AAU). Immediately after controlling power, the Derg started to implement many of the ideas that were advocated by the university community such as land reform, nationalization of industries, linguistic independence, creation of a national communist party, and rural service for university students, which ultimately alienated many students from academics (Teshome, 1990).

Consequently, many university students together with high school students joined a bloody urban guerrilla movement known as the *Nech shibir* (White Terror) that was overreacted and blocked by the Derg's *key shibir*, which means the Red Terror (Tekeste, 1996). As a result, the Derg started to blame the university system for corrupting Ethiopian values and as a result, an immense anti-intellectual climate prevailed in the system (Pankhurst et al., 1990). Government intervention in university affairs expanded including security surveillance, repression of dissent,

mandated courses of Marxism–Leninism, the prohibition of students’ organization, appointment of senior university officers, and control of academic promotion (Bishaw & Melese, 2007).

In 1977, the revolutionary government issued Proclamation No. 109/77. In this proclamation, a new organization of higher education including the establishment of the Commission for Higher Education was entertained. This proclamation had generally aimed at training individuals for high-level positions in accordance with the national plan of development and to provide medium-level personnel to meet the immediate needs of the economy (Bishaw & Melese, 2007).

A postgraduate studies program was established in 1978 which had an enrolment of 246 students in 1982/1983, of which 15 were women. Graduate programs were offered in several fields including engineering, natural sciences, agriculture, social sciences, and medicine. In support of the education and training given in these fields, different research institutes were established. Addis Ababa University and its satellite colleges, such as Bahir Dar Teachers College, provided an evening extension program offering courses in many fields. The extension program had opened a great opportunity for those who did not get access to higher education through matriculation and for those who needed to upgrade their qualifications through on-the-job training. The college of agriculture at Alemaya, which was part of Addis Ababa University, was granted independent university status in 1985 (Bishaw & Melese, 2007; Teshome, 1990, 2004).

Generally, the higher education system during the Derge regime was criticized for its top-down management system, lack of vision, lack of equal opportunity, resource constraints, and consequently the low level of quality of education (Tekeste, 1996).

2.7.2. Contemporary State of Higher Education in Ethiopia

When the Ethiopian People's Revolutionary Democratic Front (EPRDF) came to power in 1991, the majority of HEIs were closed either because some of them were occupied by the then freedom fighters or because students of some HEIs were sent to different military camps for military training by the Derg regime. When the EPRDF occupied the Capital, the majority of the students from different military training camps migrated to Kenya being afraid of the possible conflicts that would arise between EPRDF troops and the government troops and the confusions that arise. After one year, the HEIs were engaged in reorganizing the institutional set-up and the psychological make-up of the institutions' community. Since then, the academic calendar of the HEIs was affected by minor and major students' movements against some of the new political, economic, and social policies of the new government (Bishaw & Melese, 2007; Alemayehu, 2006).

In 1999, enrolments reached 5,154 and 7,199 in diploma and degree programs, respectively. There was total of 27,345 regular students in the institutions of higher learning in 1998–1999 academic years. Of these, 16 % were females. The number of graduates in the year 1999 was 6,111; of these 14 % were women. The rate of enrolment and graduation of female students was still at a lower level as compared to their male counterparts. Until 2000, there were only two universities. In 2002, six additional universities were established (MOE, 2003).

The years from 1999 to 2007 are characterized by high expansion of higher education in terms of student enrolment, fields of study, graduate programs in the already established universities by adding additional infrastructure, libraries, laboratories, dormitories, classrooms, sport fields, and computer centers and establishing new universities in the different regions of the country. Despite these efforts, participation remains low at 2 % of school leavers (Bishaw & Melese,

2007) Currently, there are more than 45 public universities and many other private university colleges.

As Teshome (2004) identifies, generally, the higher education of the current government has passed through three major stages including (a) policy and strategy adaptation, especially the legal framework, (b) rehabilitation and expansion of facilities, and (c) improvement and revitalization of the system. The first of these stages focused on setting a working higher education proclamation. As a result, in 2003, the first Higher Education Proclamation 351/2003 was announced. This was then followed by the revised proclamation in 650/2009 in 2009. Very recently, the country has announced its third Higher Education Proclamation-1152/2019, which is yet to be implemented fully.

2.7.2.1. Governance

Universities have three major functions. These are training, research, and community services. Recently, contributions to society have increasingly been expected from higher education institutions as the role of universities has been stressed by policy makers and scholars, and their establishments have been geared towards achieving these missions. In fulfilling this, an external governance system and institutional governance is essential. Governance denotes the structures, relationships, and process of decision-making concerning issues significant for external and internal stakeholders (Mulu, 2012). In this regard, governance in higher education institutions indicates the formal and informal arrangements that permit them to make decisions and perform actions combining both internal and external governance (Yirdaw, 2015).

In Ethiopia, universities are governed by University Boards. These boards were previously placed under the jurisdiction of the Ministry of Education, but now they are controlled by the

Ministry of Science and Higher education. They are accountable to the Ministry and are composed of 7 voting members and the president of the University who is a non-voting member (Yirdaw, 2015). The President is also appointed by the Ministry, albeit he/she is accountable to the board. The Ministry is also given the authority to reform and change the board in whole or in part (MoE, HEP, 2009, Article 47.5) whenever it deems it necessary. The president with four vice presidents are the higher leadership in almost all of the public universities. In some universities, the heads of the institutions and colleges have equal status with the vice presidents, such as in the health and technology colleges (Wondwosen , 2012).

The Higher Education Proclamation of the country states that members to be nominated shall be notable personalities, especially in teaching or research, and of integrity, or be representatives of the customers of the products and services of the institution (MoE, HEP, 2009). But in practice, the nomination and appointment are not as per the Proclamation. Although not stated in any article of the proclamation, the president and the majority of members are from the locality where the higher education institution is located, irrespective of their merit and familiarity with the higher education institutions (Wondwosen, 2012). However, changes have been made on the appointment of the presidents. It is being made merit-based and the voices of teachers and students are started to be taken seriously.

2.7.2.2. Finance

Almost entirely, the financial source of all public universities in Ethiopia is the federal government. From the total budget allocated to education in Ethiopia, 40 % of the recurrent and capital budget goes to Ethiopian higher institutions (Mulatu, 2016). Hence the public universities utilized the lion's shares of the total budget of the education sectors.

The Ethiopian higher education proclamation clearly states that in pursuit of its mission, every public institution is granted all the necessary autonomy in the utilization of allocated budget with equivalent accountability. The Proclamation has now expanded institutional autonomy since universities are given the freedom to manage their budget and decide on resource allocation without government approval. The source of finance and allocation method is stated on Article 62. It states: ‘Public institutions shall be funded by the Federal government or states through a block-grant system based on strategic plan agreement’ (MoE, HEP, 2009).

2.7.2.3. University Teachers’ Burden

As in any other professions, working conditions, the overall environment under which academic staff perform their daily tasks, determines not only their motivation to work but also their sense of belongingness, attachment to their institution, and even their self-esteem (Ayenachew, 2013). Ayenachew went on stating that the working conditions and remunerations of academic staff in Ethiopia are poor, like in many of the African Countries.

Even if teachers (in Ethiopia) are supposed to teach, conduct research, and community service (MoE, HEP, 2009), the teaching mission takes much of their times due to the rapidly increasing student-to-teacher ratio (Wondwosen, 2012; Semela, 2011). The massive expansion has also given a way for gross admission of students who are not prepared enough for university-level education exacerbates the discontent of the academic staff (Semela, 2011). According to Ayenachew, (2013), most academics hold other jobs to boost their income to a decent level.

2.7.3. The Development of the University Third Mission in Ethiopia

The University Third Mission, defined as university service, has a long history in Ethiopia. It has started at the beginning of 1958 when students in the University College of Addis Ababa

(UCAA) began various kinds of social work activities. Female students attended childcare courses and spent some time every week under the auspice of the dean of women, Maria di Giacomo, visiting orphanages and making toys (Balsvik, 2005). In 1959, a social work program with six group of students organized a regular visit to the entoto community center and an orphanage school at Kasanchis. Balsvik further states that in the following years, a community service committee collected money and did field mainly connected teaching and the distribution of food and clothing.

According to Balsvik, (1985) the main aim of university service was to give students insights into the needs of Ethiopian society, inspire a sense of service and develop creative thinking about what contribution students could make. The need to prove that the institution could be of immediate benefit to society was another consideration. Behind all this was certainly an honest wish to narrow the casting gap between the university and the larger community

Towards the end of 1960s, opportunities to directly observe and collect knowledge of the conditions of the common people were eagerly sought as weapons with which to attack the social and political system. In 1966 several Ethiopian university teachers, themselves former UCAA students believed that a considerable increase in student concern for social problems had taken place since the 1950s (Fisseha, 1984). These statements support the conclusion such a process was in the making. This was later stimulated by one-year compulsory university service which was proposed, debated, and established.

The Ethiopian University Service (EUS) a degree (and diploma) requirement of Hilesilassie I University. Ethiopian University Service participants were expected to perform specific assignments diligently, but they also were expected to do something extra on their own

initiatives, something beyond the call of the duty. The one year of interruption of university studies not only helped raised consciousness but also, for many, was a year of personal adventure in which they discovered how little they know of their own country and people. As most of the students who attend the university came from town, the service year brought individuals nearer to the rural Ethiopia and gave those invaluable insights into its problems and conditions in which the community live (Trudeau, 1968).

As the program (EUS) continued and more focused on active community service, misunderstandings, conflicts, and clashes between local authorities and EUS students occurred with increasing frequency. In some places, local officials attempted to sow ill feelings against EUS students, to isolate them (Teferra 1997). These experiences tempered the initial passion among staff, administrators, and some students for extracurricular activities and involvement in the local community. According to Ottaway and Ottaway (1978) after 1969, the academic aspect of the program is strengthened while the community service aspect was diminished in order to make the EUS students busy. In 1969 most of the Peace Corps teachers left Ethiopia. Consequently, EUS students took most of their places. Due to this, the influence of these EUS participants started to prevail in the county. They began to influence every decision of the government by organizing protests through mobilizing secondary school students and others. The Ethiopian University Service became matured and changed into student movements, which produced enormous changes in the country (Zewde, 2000).

The early 1970s was characterized by the rise of student political activism and social critique, witnessed the coming and failure of the coup, the decolonization of Africa (there were African students on government scholarships), and the rise of global student radicalism (for example, in Paris in 1968) (Teferra 1997). These internal and external events had a direct and indirect

impact upon the political and social outlook of university students who now became vocal activists, articulate and intransigent, both in and off campus , having abandoned, as Amutabi pointed out while referring to Kenyan university students, “...their ivory tower mentality” (Amutabi, 2002: 161-163). As Addis noted, “The sixties were a decade crowded with demonstrations, rallies, and active mobilization of forces against both feudalism and imperialism” (Addis 1975: 95). This simply entails that discussion on students' movement is an indicator of the purpose of the University for social change in Ethiopia. It also shows how close the university was to the social affairs in the country.

Another strong indication of the closeness of the university to the community was observed during the famine of 1970s. This was a period when university students and faculty supported famine victims through a famine relief fund (Zewde, 2014)and then served in rural areas in the *zematcha* (campaign) of the *Derg* regime (the regime from 1974 to 1991).

The connection between the community and university was not only limited to university services for students. Haileselassie I University (now Addis Ababa University) has a history of continuing education programs through extension programs (evening programs) for those who could not attend the university through regular programs (Wondwosen, 2019). This opportunity still forms a major component of the training services provided by all Ethiopian universities.

The above discussions show that the agenda of UTM, even if limited to some activities, is not new for Ethiopian universities. Amongst the activities, community service and continuing education are mainly observed (Wondwosen, 2019; Balsvik, 1985).

After the removal of the *Derg* regime, Ethiopia started to engage in a highly ambitious effort to expand and reform its higher education system in order to contribute more directly to its national

strategy for economic growth and poverty reduction (World Bank, 2003; Yizengaw, 2007). The Ethiopian government policy in higher education encompasses two major aspects: increasing equitable access and ensuring relevance and quality of education. These developments also increase the potential for strengthening the (science and technology) links between Ethiopian higher education institutions, the communities, the labor market and industry. While universities can interact with their communities in a range of ways, university-community engagement specifically implies collaborative relationships leading to productive partnerships that yield mutually beneficial outcomes (Sijde, Popma, & Tushune, 2012).

Currently, universities in Ethiopia are mandated to perform three core missions: teaching, research and the third mission. The third mission is expected to build and strengthen linkages with the wider public and industry, and determine its relevance to society and social responsibility (MoE, HEP, 2009).

CHAPTER THREE: THEORETICAL, CONCEPTUAL AND ANALYTICAL FRAMEWORKS OF THE STUDY

This chapter presents three key elements of the current study: First, the theoretical framework of the study that undergirds this study is presented. In doing so, the institutional theory is discussed. This is followed by the conceptual framework of the study, which tries to illustrate the logical connections among key variables in the study. Finally, the analytical framework which guides the overall analysis of the study will be presented.

3.1. Theoretical Framework of the Study

The theoretical framework offers several benefits to a research work. It provides the structure in showing how a researcher defines his/her study philosophically, epistemologically, methodology, and analytically (Grant & Osanloo, 2014). This study employs institutional theory to guide the overall journey of the investigation. To this end, the concepts of institutional theory will be extracted and discussed in relation to UTM. In doing so, first, institutions are defined from the perspectives of old and new institutionalism. Second, the institutional theory is introduced. Third, the institutionalization process will be discussed from the old and new institutionalism perspectives. Then, the discussion on the concepts of organizational field, isomorphism, and legitimacy are presented. Fifth, institutional theory in relation to educational institutions will be discussed. Finally, institutional theory in relation UTM is discussed.

3.1.1. Institutions

To begin with, I bring some definitions given by different scholars in the area. Geoffrey defines institutions as systems of established and prevalent social rules that structure social interactions (Geoffrey, 2006). Williamson (1975:16) also define institutions as "efficient solutions" to

"predefined" problems. Scott (2001:48) on his part asserts that "Institutions are social structures that have attained a high degree of resilience". He (Scott) further distinguishes between the regulative, normative, and cultural cognitive pillars of institutions, each of which outlines the different nature of institutions. These elements act together in mutually reinforcing ways to contribute to the institutional context (Scott, 2001). The following table exemplifies some of the key dimensions along which these elements differ.

Table 2: Pillars of institutions

Compliance mechanisms	Pillars		
	Regulative	Normative	Cultural-cognitive
Basis of compliance	Expedience	Social obligation	Taken-for grantedness
Basis of order	Regulative rules	Binding expectations	Constitutive schema
Mechanisms	Coercive	Normative	Mimetic
Logic	Instrumentality	Appropriateness	orthodoxy
Indicators	Rules, laws, sanctions	Certification, accreditation	Common beliefs, shared logics of action
Basis of legitimacy	Legally sanctioned	Morally governed	Comprehensible, recognizable, culturally supported

Source: Scott (2001)

I agree that institutions enable ordered thought, expectation, and action by imposing form and consistency on human activities. However, they also depend upon the thoughts and activities of individuals but are not totally reducible to them. More or less, I incline towards the definition given by Geoffry as it seems to be at the midpoint somewhere between the debate of old and new institutionalism. I define 'institutions' as systems of established and prevalent social rules that structure social interaction and are structured by it. My argument here is that institutions may structure human interactions, but they are also structured by human interactions over time.

3.1.2. The Theory

I discuss institutional theory from the perspective of organizational change. Institutional theory when used to describe the organizational change is a departure from the rational perspective which advocates that the features of organizations shift over time in order to pursue better substantive performance and achieve economic efficiency (Ashworth, Boyne & Delbridge, 2005). The institutional theory describes organizational change as driven by formal legitimacy or the need to conform to expectations of key stakeholders in their environment . In addition, rather than focusing on technical elements that are supposed to separate and identify variation among organizations with regard to change, the institutional theory focuses on social and cultural elements that try to understand similarity and stability with regard to organizational change.

Authors such as DiMaggio and Powell (1991) and Frumkin and Gadjuschek (2004) note that there is still an overriding rational school perspective that organizations strive to be efficient, but in the institutional framework researchers theorize that the drive for efficiency comes from internal and external pressures of the environment (Hanson, 2001). For example, government agencies, other organizations, and elites in the environment exert enormous amounts of pressure in various ways that force organizations to conform to particular legitimized models of efficiency (or inefficiency) (Frumkin & Gadjuschek 2004; DiMaggio & Powell, 1991).

Traditionally, there are two main streams of institutional theory; old and new or neo-institutionalism. Classic or old institutionalism is a theoretical paradigm that focuses on roles, structures, processes, and norms of organizations; or the internal environment of the organization. New institutionalism switches the focus to the interaction of the organization with others in the field, or the external environment or a blend of interactions from both the internal and external environments. While there are many differences between old and new (or neo)

institutionalism, both approaches agree that institutionalization constrains organizational rationality, but it is the sources of the constraints on which these approaches differ (DiMaggio & Powell, 1991). Old and new institutionalists identify different sources of constraint, with the older emphasizing the vesting of interests within the organization as a result of political trade-offs and alliances (similar to the rational school) and the new stressing the relationship between stability and legitimacy and the power of common understandings that are seldom explicitly articulated (p.12).

3.1.3. The Concept of 'Institutionalization' in Old and New Institutionalism

Even though it seems that there are two distinct thoughts in the institutional framework, many of the ideas are not entirely new. It would probably be more accurate to describe recent thinking (new institutionalism) as blending elements of old institutionalism (Mizruchi & Fein, 1999). This section outlines some of the differences and similarities between the old and new streams in relation to the concept of institutionalization.

Old institutionalism tends to focus on individual actor's actions and how these actions are socially constructed through stories and myths or how these actions become structured (Giddens, 1984). The new institutional school extends the social construction theme to the organizational level and considers how organizational behavior becomes so similar (DiMaggio & Powell, 1984) and it is recursive in nature (Giddens, 1984; Mizruchi & Fein, 1999).

Another difference between the two institutionalisms (old and new) is the conceptualization of the environment. Old institutionalism describes organizations that are embedded in local communities, to which they are tied by multiple loyalties of personnel and by inter-organizational treaties hammered out in face-to-face interaction while new institutionalism

focuses on non-local environments, either organizational sectors or fields roughly coterminous with the boundaries of industries, professions, or national societies (DiMaggio & Powell, 1991:13).

In addition, because “institutionalization was a process in which constraining relations with local constituencies evolved over time, older institutionalists regarded organizations as both the units that were institutionalized and the key loci of the process and by contrast, new institutionalists view institutionalization as occurring at the sectoral or societal levels, and, consequently, inter-organizational in nature” (DiMaggio & Powell, 1991:14).

I rather agree with the way Meyer and Rowan (1977) describe it when they state that institutionalization is a process by which social processes, obligations, or actualities come to take on a rule-like status in social thought and action. From their perspective, this process is driven as much by external forces as functional requirements or internal organizational rationality.

To sum up, the above discussions reveal that an action system is said to be institutionalized when the actors orient their actions towards common normative standards and values. The discussion also seems to stress that compliance to institutional norms is a requirement in the actor’s personality and compliance is assured through the moral authority that institutional norms exert over the individual. Critics of this functionalist (old institutionalism) conception of institutionalization have argued that actors’ needs are sometimes very important in the whole institutionalization process. For the critics of this functionalist view (new institutionalism), the question should not be how the institutions influence the actors; it should be on how the actors influence the institution. (Lowndes 1996; Shepsle, 1989)

I put my thesis somewhere at the midpoint between the two perspectives and take the notion that the process of institutionalization should not only focus on how institutions influence the actors (individuals), but also on how individuals influence the institutions. In other words, my argument is that institutions influence actors and being influenced by them.

3.1.4. Organizational Field, Isomorphism, and Legitimacy

Organizational fields consist of “those organizations that, in the aggregate, constitute a recognized area of institutional life: [including] key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products” (DiMaggio & Powell, 1983: 148). This means that organizations that make up a field are similar in structural and symbolic ways and share similar motivations for gaining legitimacy.

DiMaggio & Powell (1983) also discuss the process of homogenization in an organizational field. As they define it, organizational fields exist only to the extent that they are institutionally defined or structuralized (DiMaggio & Powell 1991). They went on explaining structuration to involve four aspects:

- i. An increase in the extent of interaction among organizations in the field,
- ii. The emergence of sharply defined inter-organizational structures of domination and patterns of the coalition,
- iii. An increase in the information load with which organizations in a field must contend, and,
- iv. The development of mutual awareness among participants in a set of organizations that they are involved in a common enterprise” (DiMaggio & Powell, 1983, 148).

Once structuration in an organizational field has occurred, the process of homogenization begins. The process of homogenization is best described by the concept of isomorphism which is “a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions” (DiMaggio & Powell 1983, 149). DiMaggio and Powell (1983) recognize “three mechanisms through which isomorphic change occurs, each with its own antecedents: coercive, mimetic, and normative” (p. 150). However, it should be noted that DiMaggio and Powell’s coercive, mimetic, and normative forces are considered processes or mechanisms for isomorphism, not types or forms of isomorphism (Mizruchi & Fein, 1999).

Coercive isomorphism stems from political influence and the problem of legitimacy, normative isomorphism is associated with values of professionalism, and mimetic isomorphism is a result of organizational response to uncertainty. Examples of coercive pressures that would lead to organizational isomorphism include government mandates, a system of contract law, the budget cycle, financial reporting requirements, and regulatory agencies. Normative pressure “stems primarily from values of professionalism” (DiMaggio & Powell, 1983, 152). Professionalism is associated with the members of an organization and their desire to maintain autonomy over work procedures and legitimization of their work.

Examples of normative pressures are professional networks or boards, on-the-job socialization and networking, training or professional development, formal education, and certification processes accredited by professional bodies. Finally, mimetic reinforcement also influences organizational isomorphism through organizational copying or mimicking triggered by the compulsion to establish organizational legitimacy. Hanson (2001) notes that mimetic isomorphism occurs when an “organization consciously models itself after another that it believes to represent a high level of success and achievement in the public eye” (p. 649)

As discussed so far, homogenization occurs when the structure of an organizational field changes from the activities of a diverse set of organizations to a homogenized, established, and legitimized form an overriding policy. Strengthening this, Ashworth, Delbridge, and Boyne (2005) describe this homogenized state of a field as conformity, which, according to the authors, can be seen through compliance, a state where organizational moves are consistent with the direction of isomorphic pressures in the field, or through convergence, which is the “extent to which all organizations in a field resemble each other more closely over time”(Ashworth, Boyne & Delbridge, 2005:6).

Once established, these homogenized policies become legitimized by state and professional structures and associations and they become a model for new entrants and existing entities in the organizational field. Legitimacy is seen as a sustained and driving force that is both a source of inertia and a summons to justify particular forms and practices (Selznick, 1996, 273).

Legitimacy is at the core of the organizational institutionalization process. In support of this, Suchman offered the following definition: “Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman, 1995: 574). Within this scope, he delineated two basic perspectives, an institutional view emphasizing how constitutive societal beliefs become embedded in organizations, and a strategic perspective emphasizing how legitimacy can be maintained.

Suchman (1995) proposed three clusters of legitimacy building strategies: (i) efforts to conform to the dictates of preexisting audience within the organization’s current

environment, (ii) efforts to select among multiple environments in pursuit of an audience that will support current practices, and (iii) efforts to manipulate environmental structure by creating new audiences and new legitimating beliefs.

Legitimized policies become the organizational model toward which new entrants and existing entities that are highly sensitive to their organizational environment will seek to imitate, thereby resulting in institutional isomorphism (DiMaggio and Powell, 1983). For example, according to Hanson (2001) as schools seek legitimization the process of replication begins as they look for guidance to what highly regarded schools are doing (even if they do not have the human or material resources), and begin to act and look like these highly regarded schools.

Even if actors in the organizational field put pressure on institutions towards isomorphism, some scholars argue that institutions have many differences. With institutional logic a new approach to institutional analysis which posited institutional logics as defining the content and meaning of institutions (Friedland & Alford, 1991; Haveman and Rao, 1997; Thornton & Ocasio, 1999), & Scott et al., 2000). While the institutional logics approach shares with Meyer and Rowan (1977), Zucker (1977), and DiMaggio and Powell (1983, 1991) a concern with how cultural rules and cognitive structures shape organizational structures, it differs from them in significant ways. The emphasis of this perspective, as Hasselbladh and Kallinikos, (2000), put is not on isomorphism, whether in the world system, society, or organizational fields, but on the effects of distinguished institutional logics on individuals and organizations in a larger variety of contexts, including markets, industries, and populations of organizational forms.

3.1.5. Institutional Theory and Educational Institutions

Educational organizations face “strong institutional pressures” and “operate in a highly structured (sic) organizational field,” making the educational organizational field an appropriate unit of analysis for the understanding of institutional isomorphic change (Zajac & Kraatz, 1993: 86). According to Hanson (2001) schools get tied down by the network of organizations in their fields, by laws, operating procedures, expectations of what a good school does, and so forth. He further explains that “each level of the organizational field has forces that constrain the independence of action at each successive organizational level” (p. 652).

According to Scott (1987) perhaps the most important contribution of institutional theorists is their re-conceptualization of the environments of organizations which includes the recognition that educational organizations, like any other type of organizations, exist in an organizational field. For example, a school’s organizational field would include accreditation agencies, teacher training programs, state boards of education, state legislatures, courts, other colleges and universities, textbook producers, professional associations, and federal agencies (Hanson, 2001). Organizational field pressures intensify when schools have to compete with other organizations for shared resources (public schools) and shared customers or clients (private and public schools). Hanson (2001) also notes that “the greater the constraining pressures from the environment, the fewer the degrees of freedom for educational change which consequently makes educational organizations increasingly similar (p. 649). The institutional isomorphic change model is able to provide an understanding of the environmental conditions at the organizational field level which leads organizations to conform and converge on structured practices, and established policies.

Thus, it makes good sense to look at higher education as an institution and to consider the consequences of its extensive and intensive institutionalization. Regarding this, Meyer et al.,(2005) state this:

If higher educational structures, like universities and colleges, reflect common models in national or world environments, they should show unexpected similarities across diverse settings and change in similar ways over time. And by all accounts, the university is indeed a central historic global institution, core to the distinctive trajectory of the world society (P. 9)

Riddle (1993) states that a great deal of isomorphism in aspiration and content. Has happened in universities since ever their establishment. Historically, the university's medieval roots were cosmopolitan and universal, and it spread wherever the Western system spread, retaining universalistic aspirations (Altbach, 1998). Thus, it seems pertinent to use institutional theory to use as a lens to understand how universities are responding to the constant call from their organizational field to institutionalize UTM.

3.1.6. Institutional Theory and the University Third Mission

Institutional theory literature argues that performance and legitimacy play critical roles in the adoption of certain organizational structures. Organizations imitate practices used by others and, in turn, they will gain social support as legitimacy is given by other actors (Deephouse, 1999). Such pressure could turn universities into isomorphic institutions (DiMaggio & Powell 1983). Competition across universities is intensifying as they search for grants for research excellence on the one hand, and seek legitimacy as socially desirable organizations on the other (Pineiro et al. 2012). Consequently, despite their institutional level variations and organizational differences, universities are under pressure to exercise similar practices, sometimes reinforcing imitation drifts (Teichler, 2004). According to Scott (1995), this is due institution's desire to be

seen as legitimate to the society. Scott further notes that this in turn leads to convergence and isomorphic change since concerns over legitimacy force them to adopt certain management practices and procedures that are expected to be socially valuable.

These days, universities are trying to change so as to be responsive to a set of higher education policies and funding pressure. Government policies supporting UTM strategies are placing universities under growing pressure to become more responsive with their third mission; OECD 2002; Mowery and Sampat, 2005). Universities are also under pressure from higher education funding cuts and growing pressure on impact from publicly funded research. These pressures have resulted in the progressive institutionalization of research commercialization activities and other forms of governance for external engagement activities (Geuna & Muscio 2010; Rossi & Rosli 2015).

The concept of the 'entrepreneurial university' (Clark, 1998) describes "the strategic attempts of HEIs to respond to reductions in public funding and to actively engage with industry and businesses: to improve regional or national economic performance as well as the university's financial advantage and that of its faculty" (Etzkowitz et al. 2000: 313). This university model has provided the rationale for active policy support of entrepreneurial activities such as the commercialization research results, the exploitation of intellectual property (IP) emanating from universities and, more recently, the active support of university-industry collaborations by public policy (Geuna 1999; Mowery & Sampat 2005; Bercovitz and Feldman 2006; OECD, 2007). In this context, universities have been pushed towards internal change to meet environmental demand through a variety of institutional governance mechanisms (Clark 1998).

The university evolves as a global institution, retaining much of its medieval cultural character through most of the eighteenth century, shifting into a more modern and scientific mode in the

nineteenth century, and into even broader rationalism in the twentieth century (Meyer et al.,2005). Frank and Gabler, 2006; Gabler and Frank 2005) analyze changes in faculty composition across a set of universities worldwide, through most of the twentieth century, and show consistent global trends and increasing isomorphism over time.

However, it cannot be ignored that each university has its own developmental context. Universities strive to position and differentiate themselves within an increasingly competitive sector, and they have to find their own balance between teaching, research, and a wide set of third mission activities (Molas-Gallart et al. 2002). In relation to the third mission, universities have been found to differ in at least three ways: the mix of knowledge exchange activities carried out, the partners involved in these activities, and the geographical scope of third mission interaction. In terms of the nature of activities, the literature finds that different universities engage in third mission differently.

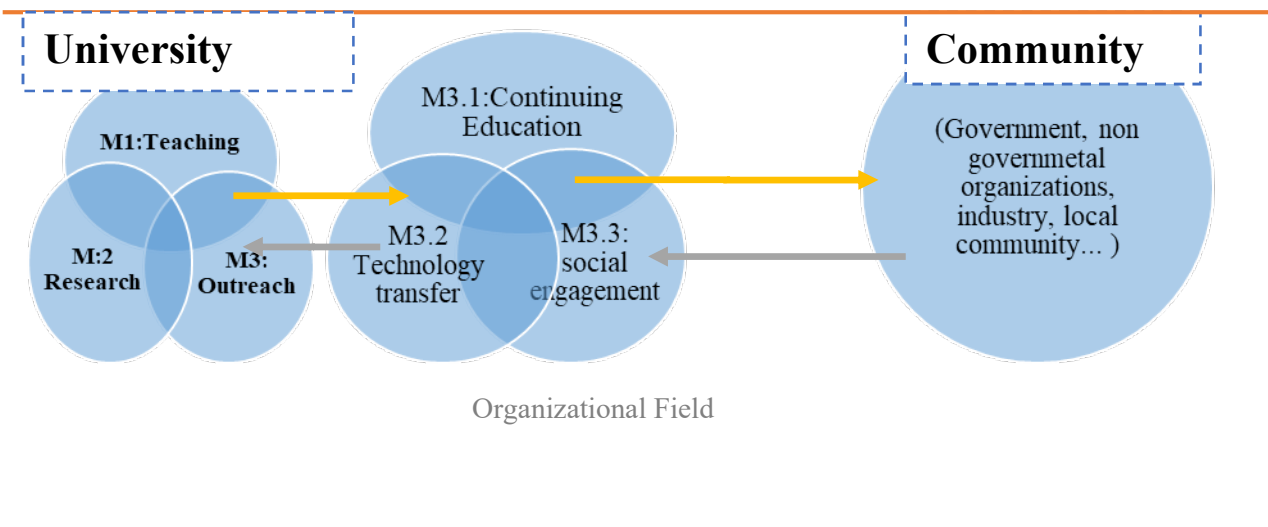
Even if UTM with its three core dimensions is not a new global agenda for the universities, its conceptualization and implementations are still different all over the world. Differences in third mission activities can be seen as the result of the combination of factors. For instance, universities' profiles which have developed over years, such as internal capabilities can be taken as one of the factors. Second, cumulative experiences, as well as a university's conscious strategic efforts to build new capability and resources for certain targeted areas of third mission activities (Sanchez-Barrioluengo et al. 2014; Day & Fernandez, 2015).

Thus, it seems pertinent to explore how universities respond to constant calls for establishing effective UTM. For this purpose, institutional theory helps to better understand and approach the case in this study. Based on the discussion on the conceptualization of UTM and the institutional theory, the following Conceptual framework is presented.

3.2. Conceptual Framework of the Study

So far, the conceptual and theoretical discussions reveal that the three core missions of the university are interrelated and mutually inclusive. The following picture (Picture 2) has shown this relationship among the missions. As can be remembered, the diagram has also shown that the three components of UTM² (continuing Education, Technology transfer and innovation, and social engagement) are connected to one another.

Figure 2: Conceptual Framework of the Study



Source: developed by the researcher based on David (2016)

The organizational field of an organization constitutes a recognized area of institutional life: (including) key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products (DiMaggio & Powell, 1983). Thus, interaction among an organization and its organizational field affect the overall institutionalization process of the organization. The organizational field of the university can be the national policy context (Government), the community, industry, professional associations and others that have a link with the university in one or another ways who act and acted on by the university as an institution in an organizational field.

Consequently, the interaction between the university and its organizational field affects the institutionalization of UTM at the universities (Mowery and Sampat 2005; Bercovitz and Feldman 2006). It can be implied from the aforementioned discussions on UTM that UTM is a mission of the university which connects the university with the community (government, industry, individuals, business firms...). Therefore, by adding this aspect (community) to the conceptual framework suggested by David (2018), a conceptual framework for the current study can be produced as follows.

The bidirectional arrows in picture 2, show the two-way relationships between the university and community. The university and other important stakeholders interact in the “organizational field” (DiMaggio & Powell, 1983: 148). It includes the national policy context (Government), the community, industry, professional associations, other universities (Hanson, 2001). The broken line embraced by the ‘university’ and the ‘community’ shows that both the university and the community can be influenced by and also influence the organizational field.

3.3. Analytical Framework of the Study

Analytical frameworks are designed to help logical thinking to develop systematically. In short, analytical frameworks are models that have the purposes of guiding and facilitating analysis and synthesis. Analysis conducted using frameworks is focused on the research questions, systematic, comprehensive, and transparent and reduces the impact of selection and process biases (Claudia, C., & Wolfgang, B., 2017). This section establishes the analytical framework that will be used to examine the process of institutionalization of UTM in the selected universities.

In order to help guide the analysis of this research, I revised the works of Furco et al., (2001, 2009, 2010); Gelmon and Seifer et.al., (2005); Kesches & Mullyaert (1997), and the indicators of

institutionalization recommended by The World Bank (2009). The analytical frameworks and discussion by the aforementioned scholars generally fall under five dimensions of the institutionalization of UTM. These are: (a) philosophy and mission of the HEI, (b) faculty support for and involvement in UTM, (c) student support for and involvement in UTM (d) community participation and partnerships, and (e) institutional support for UTM. The World Bank (2009) recommends almost the same dimensions but adds one more dimension. This dimension is the existence and function of national policy regarding the policy unit to be institutionalized.

Hence, based on the existing literature, to fit into the purpose of this paper, I classified the institutionalization process of UTM into four major dimensions: National policy context, Institutional Orientations, Institutional Support, and Stakeholders' Buy-in. These major dimensions bring many indicators that can help conceptualize the institutionalization process. The following discussions assess these core dimensions with their indicators:

3.3.1. National Education Policy Context for UTM

Education policy can be formally understood as the actions taken by governments in relation to educational practices, and how governments address the production and delivery of education in a given system. Admittedly, some promote a wider understanding of education policy—i.e. acknowledging the fact that private actors or other institutions such as international and non-governmental organizations can originate educational policies (Espinoza, 2009). According to OECD, (2015), education policies cover a wide range of issues such as those targeting equity, the overall quality of learning outcomes and school and learning environments, or the capacity of the system to prepare students for the future, funding, effective governance or evaluation and assessment mechanisms, among others.

Besides, increasingly, educational practitioners realize that both the constraints and opportunities they face are often traceable to the decisions made by national policy makers (UNESCO, 2015). Put simply, as the practices in schools are guided by the national policies, these policies should be well-written documents that can guide the practices in schools. Moreover, it is also argued that any study related to school should start from the national policy context, which helps understand the schools better (Grace, 2009). This simply implies that the national policy context impacts decisively on shaping the institutional environment. However, it has also been studied that policy developers should assure consistency in the different policies they develop so as to bring cumulative effect and avoid confusion during implementation (Peters, 2015). This can be done through developing a holistic view which is based in the idea "everything influences everything else" (Ruscio, 2003:12).

According to Day et al.,(2000), understanding and anticipating policy becomes a key feature of leadership. This includes: understanding where policies come from, what they seek to achieve, how they impact on the learning experience and the consequences of implementation are all essential features of educational leadership. In this vein, the national policy environment of Ethiopia regarding UTM is reviewed.

3.3.2. Institutional Orientation Regarding UTM

In this research, institutional orientation consists of two components: conceptualization of UTM and Integration of UTM in the universities' mission statement.

3.3.2.1. Conceptualization of UTM

An action system is said to be institutionalized when the actors orient their action to a common normative standards and values (Scott, 2001). According to Hanson, (2001), any institution should create a clear concept of its every activity it needs efficiency. This implies that conceptualization is at the center of the institutionalization process and the necessary element of the institutional orientation. In relation to UTM, Pinheiro, et al., (2012) state that one of the main difficulties with UTM notion is that it has traditionally been much more broadly defined—also taken into account contextual circumstances—when compared to teaching and research, thus resulting into considerable ambiguity as well as ambivalence by university stakeholders. Hence, in this study, the universities’ the UTM institutionalization journey would be investigated starting from how the mission is conceptualized.

3.3.2.2. Integration of UTM in the Universities’ Mission Statement

Mission statements are, statements to internal and external stakeholders of the long-term goals of an organization, the organization’s central defining purpose and its *raison d’etre* (O’Gorman & Doran, 1999) or as David and David (2003: 11) describe, “mission statements are enduring statements of purpose that distinguish one organization from other similar organization”.

Three core purposes of mission statements are: use as a guide to decision making, as a communications tool, and as a tool in directing the formulation and implementation of strategic planning. Thus, mission statements are appropriately credited with providing a roadmap through which to interpret behaviors and decisions (Ledford et al, 1995; Falsey, 1989) as well as to assist organizations to shape their identity, purpose and direction (Leuthesser & Kohli, 1997).

As described by Fugazzotto (2009:285), “mission statements dictate the core activities of an organization”. For colleges and universities, mission statements are exceptionally important; as

they can affirm, which parts of the institution should be points of emphasis, how resources are allocated, and the types of individuals that are considered exemplary members of the university community (Friedman & Silberman, 2003).

The language used to depict elements of a mission statement can also provide clues about an institution's relationship with the surrounding community, its status among peer institutions, its aspirations, and its priorities (Paina & Băcilă, 2004; Woodrow, 2006). If a mission statement is articulated regularly by prominent administrators and other university officials, the culture and direction of the institution may be understood by stakeholders. If it is not articulated frequently or is unclear, the mission statement may be ineffectual, and institutional priorities may be contested by various actors (Fugazzotto 2009).

According to Bingham, Quigley, and Murray, (2001), higher education institutions are defined as being not-for-profit organizations, which leads them to be involved and develop relationships with many more constituents than commercial organizations. Those constituents require a greater commitment that extends beyond financial relations or fiscal responsiveness (Jongbloed, Enders, & Salerno, 2008). The role that universities take on within a society is a significant one; therefore, mission statements increasingly emphasize their third dimension—service to society (Laredo, 2007; Jongbloed, Enders and Salerno, 2008; Montesinos et. al., 2008). The basic function of this third dimension of any mission refers to the knowledge transfer from the academic environment to the whole society, and it covers everything besides traditional teaching and research (Jongbloed, Enders & Salerno, 2008), from workshops, professional development courses, to establishing partnerships between educational institutions and the business community (Montesinos et. al., 2008). Jongbloed, Enders, and Salerno (2008) view a university's mission as a reflection of how the institution outlines its contribution to society.

Generally, it has been discussed in the above literature that mission statements represent the foundation upon which institutions build their strategic plans and that they should be the first step any institution takes before designing its strategy and other activities. Thus, higher education institutions should start by carefully designing their mission, in order to build a strong identity and to convey a well-defined set of values to their public. Hence, Including UTM in the mission statements of a university is a key for the institutionalization of the mission. Related to this, Friedman and Silberman (2003) state that universities that integrate UTM in their mission statements have strong performance on technology transfer activities.

3.3.3. Institutional Support

Two indicators of institutional support for UTM will be discussed under this topic. These are Policies and Strategic Documents Regarding UTM and Approaches and Coordination of the Universities towards UTM.

3.3.3.1. Policies and Strategic Documents Regarding UTM

Universities have developed a ‘third mission’ (Nelles & Vorley 2010) that consists of the generation, use, application and exploitation of knowledge and other university capabilities outside the academic environment’ (Molas-Gallart et al. 2002: 2). This mission is now considered to be very important as teaching and research. Universities’ third mission can be pursued through various activities that include, but are not limited to, commercializing scientific research, collaborating with public and private organizations, providing education to audiences beyond traditional students, contributing to public debates and to cultural activities, and engaging in social and community regeneration processes (Bekkers & Bodas Freitas 2008; Hewitt-Dundas 2012; Laursen & Salter 2004; Lawton-Smith 2007; Perkmann and Walsh 2007).

However, the implementation of the third mission agenda in universities has not occurred without controversy. Critics have highlighted potential conflicts with the other missions of the university, suggesting that the pursuit of this agenda may not only be detrimental to the university's search for research excellence (Florida 1999; Philpott et al. 2011), but also to its mission to effectively produce qualified human capital through teaching (Sanchez-Barrioluengo 2014). The distortions introduced by commercial incentives to the fundamental principles underpinning the scientific enterprise (Murray & Stern, 2007) might threaten universities' ability to fulfill all these roles simultaneously and to achieve some balance among their missions (European Commission 2011; Sanchez-Barrioluengo 2014).

Hence, clear policies and administrative directives should be in place if UTM is to be institutionalized. It has been studied that policies and related administrative directives are believed to be pressures that are important drivers of institutionalization (Sanchez-Barrioluengo, 2014; Pinheiro, Langa & Pausits, 2011).

3.3.3.2. Approaches and Coordination of the Universities towards UTM

Even though the activities of UTM are not new for universities, as a concept the "UTM" is almost a decade old. It has however become rapidly popular to refer to a further goal to add to the universities traditional teaching and research missions: the perceived need to engage with societal demands and link the university with its socio-economic Laredo, (2007). Yet, despite its success as a concept, it remains a contested one, mainly because of two reasons. First, as with many popular terms, it may owe its popularity to its flexibility; in other words, it is a plastic concept that can be stretched to cover a multitude of policy agendas. According to Wedgwood (2006), one can think of the third mission as simply an extra funding stream, as a concept to cover commercial activities of the university, or as a way to refer to the need to make universities

more responsive to the needs of the society. Second, the concept competes with other ways of addressing and understanding the relationships between university and society. “Extension” activities have been, for instance, a central element of the university agenda in many countries for many decades (Srinivas & Viljamaa, 2008). Perhaps more importantly, it has been argued that the connection of the university with society should not be understood as a separate mission (Laredo, 2007). Due to these controversies and contextual realities, universities follow different approaches ranging from simple outreach activities to high levels of engagement with the community.

Another factor related to the approaches of the university towards UTM is the universities’ organizational structure (coordination). This affects the behavior of organizations through at least two channels. First, the structure can have an effect on organization-wide measures of performance, such as profitability or speed in adopting productivity-enhancing innovations. These performance characteristics in turn influence behavior either because they enter the plans and calculations of management, or because competitive selection pressures act differentially on organizations. Second, the structure of an organization can have consequences for the individuals or operating units that comprise the organization. Also, changes in external circumstances—the economic or social environment—can produce dynamic adjustments in the firm’s internal patterns of communication and connectedness (Stephen, Catherine & Keyvan, 2000). Questions related to organizational coordination seem to be at the root of many of the questions raised about organizations (Mintzberg, 1979).

To sum up, a university’s three major tasks are teaching, research, and services (Boyer, 1990); the organizational structure of a university, therefore, is often based on how a university balances these three main missions.

3.3.3.3. Leadership and Support towards UTM

Leadership can be defined in terms of traits, characteristics, and behaviors that focus on a clear vision, action, modeling the way, ethical relationships, congruence, trustworthiness, and collaboration (Avolio et al., 2004). The nature of relationships with leaders influences job satisfaction, turnover, positive relationships, and wellbeing of followers, and organizational productivity (Avolio et al., 2004). Not surprisingly, the behavior of leaders triggers an emotional response in those they lead and affects their performance (Dasborough, 2006). Committed leaders effectively manage their emotions and inspire followers to work in complex and changing environments (McKee & Massimilian, 2006).

Leadership is at the heart of arrangements such as community-university partnerships in which diverse groups must come together with different goals and motives to take part in a collective process (Goleman 2001). According to Lipman-Blumen (2005), committed leaders are needed to provide direction concerning both the process of forming partnerships and also the goals that a partnership adopts.

Nevertheless, even when community-university engagement involves nonhierarchical partnerships, it will still require committed individual leadership to shape the nature of the collective process. Such leadership can operate in different ways through a range of structures to lead to either dispersed, participative, servant, or informal leadership (Greenleaf 2002). Thus, it is important to understand how individuals, especially those identified as leaders, seek to shape this collective process of community-university engagement. The leadership of community-university engagement, however, will face a number of general challenges common to any leadership activity.

As Greenleaf (2002) points out, any form of leadership will face dilemmas in the Twenty-First Century particularly, justifying the leadership approach, resolving clashes of values, negotiating conflicts of interest between organizations, communities, and wider society, and achieving consensus without marginalizing the views of the minority. The nature of leadership and leaders in UTM, and the approach to resolving these dilemmas will be shaped by the wider process of higher education leadership and the changing context of higher education internationally, nationally, and regionally (Bleiklie, 2007).

Discussions of successfully engaged universities attribute a central if not decisive role to administrative leadership, typically that of the president, vice presidents, and/or program director of UTM (Sandmann & Plater, 2009). The scholars further note that because of their resources, roles, decision-making authority, and imputed trust, institutional leaders in higher education are positioned to have a significant impact on the development of UTM. Therefore, exploring the attitudes, willingness, and support of such leaders towards UTM is important to get the general picture of the activities of UTM in a particular university. In this study, the support that administrative leaders give towards UTM will be explored as an indicator of the process of institutionalization of UTM.

3.3.4. Stakeholders' Involvement in UTM

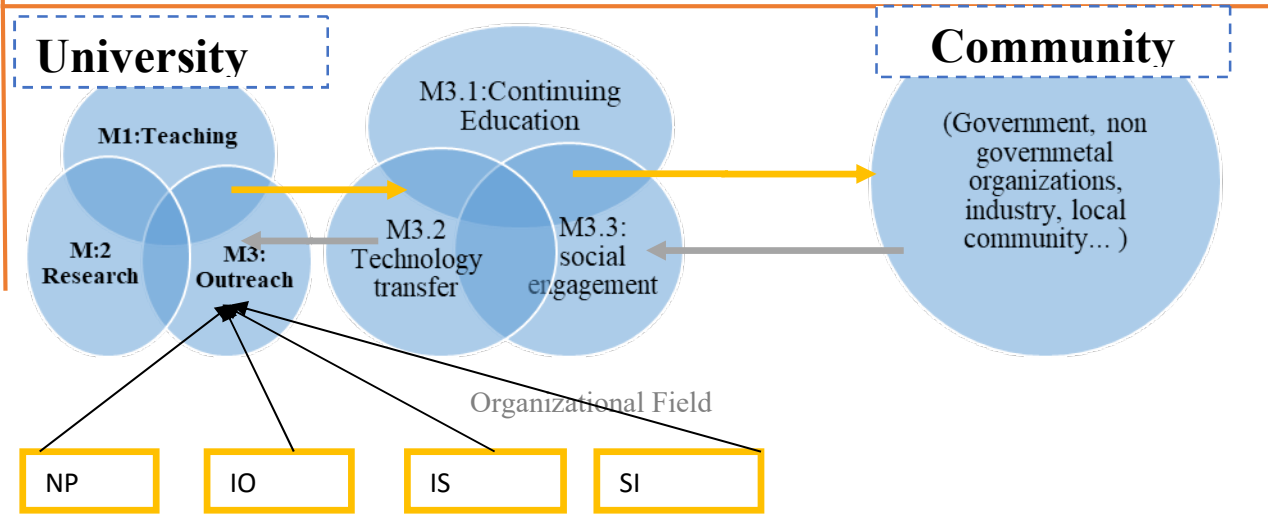
Stakeholder engagement is premised on the notion that 'those groups who can affect or are affected by the achievements of an organization's purpose' should be allowed to comment and input into the development of decisions that affect them (Neil, 2009). This is true for UTM as this mission is directed towards working with society.

Internal (students and staff) and external (the community) stakeholders have a substantial impact on the effectiveness of the UTM. In line with this, Furco, (2001) states that in delivering effective UTM through community engagement, all stakeholders (students, alumni, communities, and university staff) need to be engaged not only in the activities but also at the planning level. It has also been studied that institutionalizing UTM and creating sustainable community partnerships requires colleges and universities to go beyond the organizational frame and to connect communities with faculty teaching and research (Bringle & Hatcher, 2000; Furco, 2001).

To sum up, any effort of the university to institutionalize UTM should consider the voice of stakeholders (staff, students, and the external community). These stakeholders are people with whom and to whom it works. In this study, the involvement of stakeholders, namely university teachers, and community partners, are explored.

Generally, in this study, the process of the institutionalization of UTM in Addis Ababa and Jimma universities is explored based on the above mentioned indicators. The analytical framework of the current study has a focus on the specific indicators of the institutionalization process of UTM at universities. It is an extension of the conceptual framework presented in picture 2 with the addition of specific indicators of the institutionalization process from the organizational field. This can be presented as follows:

Figure 3: Analytical Framework of the Study



Source: developed by the researcher based on David (2016) and the conceptual framework

Note: NP: National Policy,

IO: Institutional Orientation,

IS: Institutional support,

SE: Stakeholders' Involvement

CHAPTER FOUR: RESEARCH METHODOLOGY

This chapter discusses the general methodology of this research. Specifically, the chapter discusses the paradigm, the research design, case selection rationale, participants of the study, sampling techniques, data collection instruments, procedures, data analysis methods, unit of analysis, and ethical considerations of the current study.

4.1. Research Paradigm

This study is aimed at investigating the institutionalization of the UTM in two selected Ethiopian public universities. To achieve this, I employed the philosophical assumption of pragmatists. Pragmatism, as a paradigm, seeks to mediate between the empirical and idealist traditions and to combine what is most significant in each of them. Supporting this, Paulinus and David, (2013) define pragmatism as an attitude, a method, and a philosophy or paradigm that uses the practical consequences of ideas and beliefs as a standard for determining their value and truth. Similarly and as already noted among the concepts UTM are workability and practicality of ideas, theories, research outputs, and policies, (Fitzgerald & Van Eijnatter, 2002), are the core ones.

Moreover, the philosophical position of pragmatism helped me to mediate between the old (qualitative) and new (quantitative) institutional theories. Pragmatism recognizes that the process of institutionalization is not only promotion of stability and resistance to change (objectivity), but also becoming more flexible and adaptive to change (subjectivity) (Ansell et al. 2015). By implication, this means that the study of the process of institutionalization should not be one-sided which focuses on only agency (individuals) or structure (the institution), rather the full image of the institutionalization process can be found by studying both agency and structure. In line with this, Lovas and Ghoshal (2000) state that in averting a one-sided focus on agency or

structure, pragmatism replaces the simplifying assumptions of key alternatives with a more complex yet realistic view of relations, individuals, and institutions which presents a distinctive model for dealing with the multilevel study. Hence, in this study, the process of institutionalization in this study is studied both from agency and structure perspectives.

4.2. Mixed Research Methodology

The mixed research methodology is used in this study. Mixed research methodology, frequently referred to as the ‘third methodological orientation’ (Teddlie & Tashakkori 2008), draws on the strengths of both qualitative and quantitative research. While there is no universal definition of mixed methods research, Creswell and Clark (2011) outline its core characteristics: In a single research study, both qualitative and quantitative strands of data are collected and analyzed separately, and integrated either concurrently or sequentially to address the research question.

According to Onwuegbuzie and Combs (2010), the mixed methodology involves the use of at least one qualitative analysis and at least one quantitative analysis meaning that both analysis types are needed to conduct a mixed analysis. Instead of approaching a research question using the binary lens of quantitative or qualitative research, the mixed methodology research approach can advance the scholarly conversation by drawing on the strengths of both methodologies. In recent days, many mixed methodologists (Creswell, 2003; Bryman, 2012,) claim mixed research as the best methodology of research because of a number of reasons. First, it gives a view that philosophically embraces the use of mixed model designs. Secondly, it eschews the use of metaphysical concepts that has caused much endless discussion and debate. Finally, it presents a very practical and applied research philosophy.

In this study, I used an exploratory sequential mixed research design. In exploratory sequential design, according to Creswell and Clark (2011), the researcher first collects qualitative data and then quantitative data. The purpose of an exploratory sequential mixed methods design involves the procedure of first gathering qualitative data to explore a phenomenon and then collecting quantitative data to explain interactions found in the qualitative data.

To fit to the purpose of this study, qualitative data were used to explore the national policy environment regarding UTM, the institutional orientation, and the institutional support of the universities (Addis Ababa and Jimma universities) towards UTM. Qualitative data were also used to investigate the views of community partners towards UTM in their respective universities. The quantitative data were used to assess the awareness of, attitude towards and involvement in UTM of the two universities' teachers. In other words, the data from the qualitative part had given input for the development of the questionnaire filled by the university teachers. This entails that there are two phases of data collection and analysis.

Hence, the first phase is devoted to qualitative data from document and website reviews, and interviews. As mentioned above, I use these data to have a clear and deep understanding of the problem. The second phase is the quantitative part which assesses the view of one of the core stakeholders, teachers, towards UTM on their respective universities.

4.3. Comparative Case Selection

I conducted the research at relatively older universities in Ethiopia that generally have an established organization for dealing with the UTM. Accordingly, the oldest university in Ethiopia, Addis Ababa University, is chosen. Addis Ababa University is Ethiopian Flagship University and most often flagship universities are dubbed ivory tower (Tefera, 2008). By ivory

tower, it means that universities are supposed to be separated from the reality and the practical concerns of the society, which is against the notion of engaged universities (Altbach, 2011). Jimma University, however, is known as a university that is very committed towards the Third Mission (Duren et al., 2013). On top of this, the philosophy (motto) of Jimma University which says " we are in the community" is also something that attracted my attention. I, then, wanted to compare Jimma University-the emerging with Addis Ababa University- the flag carrier. Moreover, as has been displayed on their websites, both universities have some similar characteristic features such as number of academic and administrative staffs, number of students, diversity of academic programs, and other organizational structures like how community engagement activities are directed. However, these universities have also differences in the year of establishment and in the context in which they are operating.

Thus, it gives sense when one tries to compare a flagship university dubbed as an ivory tower (Tefera, 2008), with a university which it is thought to be committed to UTM (Duren et al., 2013).

4.4. Participants and Sampling Techniques of the Study

This study follows an exploratory sequential mixed method. Thus, there are two phases for the data collection and analysis: qualitative and quantitative phases. This, in turn, means that there are two sampling procedures to choose participants of the study.

Phase I: Sampling Technique for Qualitative Component

For the first phase of data collection, document reviews and face-to-face semi-structured interviews were done. For the interview, a total of 20 interviews from both universities were made. This is composed of a participant from the Vice President for Research and Technology

Transfer Office; participants from the office of Director for Community Service; a participant from the office of Director for University-Industry Linkage and Technology Transfer; and participant from the office of Director for Continuing and Distance Education were included. Since the data were not saturated for Jimma University at the beginning, two additional participants from the office Community-Based Education Program (CBEP) and from the office of the Research Director were included for the interview from Jimma University. The selection of the officials was done purposively due to their closeness to the issue at hand, UTM. For the interview with the community partners, 4 and 5 participants were selected from Addis Ababa and Jimma universities respectively. The selection was done using snowball sampling which started from the suggestion of officials of the university. Moreover, a high-level official from the Ministry of Science and Higher Education (MSHE) is also interviewed purposefully in order to assess the issue of UTM at the ministry's level.

For document reviews at a national level, Ethiopian Education and Training Policy (EETP), Ethiopian higher education proclamation, the Growth and Transformation Plan (GTP), Education Sector Development Plan V (ESDP V), and Science, Technology and Innovation policy (STI) are included purposively due to their relevance to the topic of this study. For the institutional level document review, websites, universities' legislation, strategic plan, policy documents, and annual reports on UTM of the universities are taken purposively since these documents give detailed information about the UTM in these universities.

Phase II: Sampling Technique for the Quantitative Part

Under the second phase, quantitative data were collected and analyzed from teachers in both universities. From the university teachers, assistant professors, and above who have 2 years and above experience in the current universities are chosen. The academic status and experience was set at the mentioned levels since I believed that these professionals are the one who are supposed to vastly involve in research and community services activities of the universities. The load for teaching is reduced for these professionals since they are supposed to invest most of their time in research and technology transfer activities (MoE, HEP, 2009). All academic units established at college/institute levels except College of Health Sciences from both universities and Institute of Technology from Jimma are included in this study. College of Health Sciences is excluded from the choice since this institute is independent of most of the UTM activities in both universities. Institute of Technology is also excluded from Jimma University as it is also independent on most of UTM activities.

Hence, 19 colleges and institutes from Addis Ababa University and 6 colleges/ institutions from Jimma University are identified to be the general scope from which five colleges/ institutes are chosen. In order to choose teachers from these colleges/institutes, stratified proportionate random sampling is used. Finally, a simple random sample was done on the colleges/institutes. Based on the simple random sample, the college of Natural and computational sciences, college of educational and behavioral sciences, college of social sciences, college of veterinary medicine and agriculture, and Addis Ababa institute of technology are selected from Addis Ababa University. While the college of social sciences and humanities, college of business and economics, college of agriculture and veterinary medicine, college of education and behavioral

science, and college of natural sciences are chosen from Jimma university. Addis Ababa University has 557 assistant professors and above in the colleges/institutes while Jimma university has 287 teachers at this level in the mentioned colleges/institutes. This means that a total of 844 teachers from both universities are part of this study.

Based on the random table suggested by Krejcie and Morgan (1970), the sample size was determined to be 162. This means that if 162 response rate is registered and analyzed accordingly, the study can be generalized to the population. Then, using proportionate stratified random sampling technique (Singh, 2007), 106 teachers from Addis Ababa University and 56 from Jimma University were initially included in the study. But in order to get a good response rate, I made the sample size to be 130 and 90 for Addis Ababa and Jimma universities, respectively. I did this based on the experience during the pilot study where most of the teachers were not willing to fill and return the questionnaire. This total number is also divided into colleges/institutes based on their proportion. The following tables show the procedures used for both qualitative and quantitative parts.

Table 3: Addis Ababa University Sample for Teachers

No	Colleges/faculty	Population size	Sample size
1	Natural and computational sciences	288	67
2	Social sciences and humanities,	83	20
3	Educational and behavioral sciences	81	19
4	Veterinary medicine and agriculture	43	10
5	Addis Ababa institute of technology	62	14
Total		577	130

Table 4: Jimma University Sample for Teachers

No	Colleges/faculty	Population size	Sample size
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1	Natural sciences	72	22
2	Social sciences and humanities,	75	23
3	Educational and behavioral sciences	37	12
4	Veterinary medicine and agriculture	84	26
5	Business and economics	19	7
Total		287	90

Table. 5: Participants and Sampling of the Study

Setting	Participant	Sampling	Number of Participants	Data collection tools
National level	Official from the Ministry of Science and Higher Education	Purposive	1	Semi-structured interviews
Addis Ababa University	Office of VP for research and technology transfer	Purposive	1	Semi-structured interviews
	Office of community service	Purposive	1	Semi-structured interviews
	Office of UIL TT	Purposive	1	Semi-structured interviews
	Office of distance and Continuing Education	Purposive	1	Semi-structured interviews
	Teachers	Stratified proportionate random sampling	130	Questionnaire
	Community partners	Snow ball	4	Semi-structured interview
	Policy and other documents	Purposive	-	Document reviews
Jimma University	Office of VP for research and technology transfer	Purposive	1	Semi-structured interview
	Office of community service	Purposive	1	Semi-structured interview
	Office of UIL TT	Purposive	1	Semi-structured interview
	Office of Continuing Education	Purposive	1	Semi-structured interview
	Community based education	Purposive	1	Semi-structured interview
	Research directorate	Purposive	1	Semi-structured interview
	Teachers	Proportionate stratified random sampling	90	Questionnaire
	Community partners	Snow ball	5	Semi-structured interview
Policy and other documents	Purposive	-	Document reviews	

4.5. Data Collection Tools and Procedures

The data collection was conducted in two phases. Under the first phase, qualitative data were generated through semi-structured interviews and document reviews. This is followed by the second phase-quantitative data were generated through a questionnaire. These procedures are discussed hereunder.

Phase I: Qualitative

4.5.1. Semi-Structured Interview

Interviews are commonly used in exploratory and descriptive studies. There are a range of approaches, from unstructured interviewing in which the subject is allowed to talk freely about the topic of the investigation to highly structured interview in which the subject responses are more or less completely limited to answering direct questions. The degree of structure enforced on an interview will actually vary along a continuum but it is useful to classify interviews into three main types: structured, semi-structured, and unstructured (Creswell & Clark, 2011). This study employs semi-structured interviews. Semi-structured interviews involve a series of open-ended questions based on the topic areas the researcher wants to cover. The open-ended nature of the question defines the topic under investigation but provides opportunities for both interviewer and interviewee to discuss some topics in more detail (Bryman, 2012). If the interviewee has difficulty answering a question or provides only a brief response, the interviewer can use cues or prompts to encourage the interviewee to consider the question further. In a semi-structured interview, the interviewer also has the freedom to probe the interviewee to elaborate on the original response or to follow a line of inquiry introduced by the interviewee (Creswell, 2014).

In this study, semi-structured interviews were conducted with participants from Vice President for Research and Technology Transfer, Director for Community Service, and Director for University-Industry Linkage and Technology Transfer, Director for Continuing and Distance Education, and Director for Community Based Education. At a national level, an official from the MSHE is interviewed. Besides, community partners of the universities are interviewed. I developed semi-structured interview guides based on the analytical framework of the study and the reviewed literature.

For those participants who allowed tape recording during the interviews, the interview sections range from 40 minutes to 2 hours and I did all the interviews. The interviews are done during the period from January 2019 to April 2019.

4.5.2. Document Review

Document review is routinely carried out in both qualitative and quantitative research, its full potential is rarely tapped and the resources and literature on the subject of document review is very scant. In its most elementary form, it is just analysis of documents to gather facts. However, gathering facts through document review is not an easy endeavor (Bryman, 2012). Yet, if properly analyzed, data that can be found from documents is invaluable (Creswell, 2014). In this study document review was conducted at two levels: at the national and institutional levels: At the national levels, Ethiopian Education and Training Policy (EETP), Ethiopian higher education proclamation, the Growth and Transformation Plan (GTP), and Education Sector Development Plan V (ESDP V) were reviewed while at institutions level, web sites, universities' legislation, policies, strategic plans annual reports and other secondary documents are explored. The documents are reviewed based on a guideline prepared for this purpose. The guidelines for

the reviews were mainly based on the basic questions of the research. These reviews were conducted hand in hand with the interviews during the period from January, 2019 to April, 2019.

The second phase of data collection was held after the collection and analysis of the qualitative data (phase I). The first phase has given the overall picture of and deep understanding on the UTM at the two universities. In order to fill some hole created by the first phase, quantitative data were collected

Phase II: Quantitative

4.5.3. The Self-completion Questionnaire

The self-completion questionnaire is sometimes referred to as a self-administered questionnaire. With a self-completion questionnaire, respondents answer questions by completing the questionnaire themselves. As a method, the self-completion questionnaire can come in quite a lot of different forms and it is very suitable to collect data from a large group of participants (Bryman, 2012). This study used a self-completion questionnaire to collect data from teachers. Like the aforementioned data collection tools, the development of the self-completion questionnaire has mainly based the results of the qualitative data and the reviewed literature.

A five points Likert scale questionnaire was used in order to collect data from teachers. The questionnaire for teachers was aimed at collecting data on teachers' awareness of, attitude towards, and involvement in UTM of their universities. Totally 50 close-ended items were developed. These items were categorized under three main themes: The first theme is about the awareness of teachers on UTM (17 items). The second theme measures teachers' attitude towards UTM (17 items). Finally, 16 items were categorized under teachers' involvement in UTM sub-theme. The Likert scale for the first category (awareness of teachers) ranges from 5= very surely to 1= not at all. For the second category on the attitudes of teachers, the Liker scale

ranges from 5= strongly agree to 1= strongly disagree. The third category on the involvement of teachers in UTM, the Likert scale ranges from 5= very frequently to 1= not at all.

The questionnaire was prepared and administered in English language. Since some items in the questionnaire were constructed in negative sentences, reverse scoring was applied during data encoding. The data collection was done during the period from May, 2019 to August, 2019. Out of the total distributed questionnaires (220), the response rate is 186 (101 for Addis Ababa and 85 for Jimma Universities) were properly filled and returned. This means that 29 questionnaires from Addis Ababa University and 5 questionnaires from Jimma University could not be included in the study due to incomplete responses and unwillingness to fill and return the questionnaire timely.

4.6. Validity and Reliability

Phase I: Qualitative

As it has already been discussed, the first phase of this study is devoted to qualitative data collection and analysis. In qualitative research “the reality is holistic, multidimensional and ever-changing” Merriam (1998: 202). Therefore, it is up to the researcher and research participants to attempt to build validity into the different phases of the research from data collection through to data analysis and interpretation (Bryman, 2012). The principles underlying qualitative research are based on the fact that validity is a matter of trustworthiness of the study. According to Merriam (1998), trustworthiness can be achieved through four things: credibility, transferability, confirmability, and dependability.

Credibility entails the confidence of the researcher towards the truthiness of the research findings. This can be gained through triangulating all data sources (Burnard, 1991). In this

study, the data sources were triangulated against each other. For instance, data to be obtained from offices of directors and document reviews were triangulated with the data obtained from teachers and the external community.

Second, transferability, this is a concept related to the extent to which research findings are applicable to other contexts and this can be achieved through giving a detail description of the research context (Marriam, 1998). In this study, thick descriptions are used to show that the study's findings can be applied to other contexts, circumstances, and situations (transferability). In this research, the context of the study (Jimma and Addis Ababa universities) are described in depth.

Third, confirmability, the cleanness of the findings from the researcher's bias or personal motivations. This can be achieved through Audit trail (Sandelowski, 1993). This is a concept related to clearly showing every step of the data analysis. Thus, to reduce problems related to confirmability, I tried to describe every step of the data analysis from every source.

Finally, dependability, replicability of the study by other researchers. According to Sandelowski, (1993), to ensure dependability, an inquiry audit will be used in order to establish dependability, which requires an outside person to review and examine the research process and the data analysis in order to ensure that the findings are consistent and could be repeated. In this study, the supervisors and colleagues had been asked to comment on every process of this research and they gave valuable comments. Based on their comments, many items were rephrased and a few were removed from the list.

Phase II: Quantitative

The second phase of this study is devoted to quantitative data collection and analysis. Accordingly, five-point Likert scale questionnaire was prepared and data from teachers were collected and analyzed. Once the questionnaire had been developed, their validity and reliability were checked.

I tried to ensure the content validity of the questionnaire. In order to do so, the questionnaires were given to three experts in the area. Two of them are working as a director for community service and coordinator for community service at Woldiya and Bahir Dar universities, respectively. The other one is a lecturer at Addis Ababa University, the social work department. The intention of consulting these individuals is that they have the experience of and knowledge about UTM. Moreover, the questionnaire was checked against the analytical framework of the study and other related literature. Based on the experts' comments and literature review, the unclear and obscure questions were revised and the complex items reworded. The originally developed 52 items were shortened to 50 items since two items were found to be redundant.

In order to calculate the reliability of the questionnaires, a pilot study was conducted in Woldiya University, one of the public universities in Ethiopia. The pilot was conducted on 38 teachers, and the result of the Cronbach alpha ($\alpha = 0.839$) shows the items have relatively high internal consistency (reliability) and it is considered acceptable in social sciences (Bryman, 2012). After the pilot test was conducted, some rephrasing were made on three questions (Questions 14, 27, 32) in order to make them more precise. Some teachers jumped these questions while some put their comments suggesting the questions need rephrasing. The questionnaire for university teachers was constructed and administered in

English. Teachers were given enough time to thoroughly read the questionnaire and respond genuinely.

4.7. Methods of Data Analysis

Phase I: Qualitative

This study is composed of both qualitative and quantitative data. As can be recalled, the data collection job has two phases: Qualitative and quantitative data collection. In order to get an in-depth understanding of the issue at hand and to develop a tool for further study, qualitative data were collected and analyzed in the first phase. Quantitative data were collected and analyzed in the second phase which helped me get large data from university teachers. The analysis part of this study is divided into four parts: the first part deals with analysis on the national policy environment. The second and third parts are devoted to the institutional level explorations on Addis Ababa University and Jimma Universities, respectively. Finally, cross-case analysis is taken place as a fourth part. At the cross-case analysis part, results of the explorations into the two universities are compared and contrasted for similarities and differences. The themes in which these qualitative data fall under are developed based on the analytical framework of the study. Put differently, the qualitative data generated through semi-structured interviews and document reviews were categorized under the analytical frameworks of the study. Some important data were found beyond the themes under the analytical framework and they are analyzed by creating sub themes under the general framework. Basic questions of this study had also helped to shape these themes.

Phase II: Quantitative

For the quantitative part, data were generated from 186 teachers, 101 and 85 teachers from Addis Ababa and Jimma universities respectively. From Addis Ababa University, ten (10) teachers did not properly fill the questionnaire. Five (5) teachers refused to fill while 14 did not return the questionnaire. Five teachers from Jimma University could not return the questionnaire. The data generated from the questionnaire were coded and entered into SPSS (Statistical Software Package for Social Sciences)-V. 25. Before the analysis is done, different assumptions of the statistical data, like a normal distribution, linear relationship, and equal variance, were taken into consideration. Once the assumptions are ensured and all the data are correctly coded, analysis were done using different quantitative data analysis methods.

Accordingly, a single sample t-test was used in order to calculate the current status of teachers' awareness of, attitude towards and involvement in UTM at their respective universities. Results of the single sample t-test were compared in the comparative analysis part. For the sake of creating meaningful conclusions, the questions on the questionnaire were further categorized in sub-themes (explained in the analysis section).

2.8. Unit of Analysis

The term unit of analysis can be simply defined as the entity that is being analyzed in scientific research. Determining or being cognizant of the unit of analysis of the research has a pivotal role in any research endeavor (Neuman, 2006). In this study, the unit of analysis is done at the institutional (organizational) level. The activities of the universities may vary across faculties and departments, but this study is focused on the institutionalization process of the UTM at the

institutional level. Thus, the comparison is between the two universities just at the institutional level.

2.9. Ethical Consideration

Ethical consideration is essential for any given research. Among other things, it highly promotes the overall quality and acceptability of a research. But, it should be noted that ethical consideration is not a one-time activity, rather researchers need to carefully consider and plan from the start of the research project in order to overcome possible ethical consequences (Creswell, 2014). Accordingly, attempts were made to take ethical issues into account throughout the process of this research. The following are the ethical considerations made in this study.

Permission to conduct the research on Addis Ababa and Jimma Universities was formally asked for by letter. Soon after Permission at the institutional level was gained, agreement with the participants (both qualitative and quantitative components) of the study was reached on the interviews (informed consent). Some participants agreed to get their voice recorded while some others refused to be recorded. For those with whom the audio recording was impossible, I took quick notes. The other ethical issue is keeping the confidentiality of the participants during data analysis. To achieve this, the identity of all the participants was kept hidden by using codes instead of names and positions. In order to reduce bias, the different views of the interviewees were presented as they are without paraphrasing.

CHAPTER FIVE: NATIONAL POLICY ENVIRONMENT VIS A VIS UTM

National policies, proclamations, and programs serve as points of reference for different guidelines, institution-level policies, and plans (Les Bell and Howard Stevenson, 2006). This chapter explores national policies on education in UTM in Ethiopia focusing on the key political texts. These are the Education and Training Policy (ETP), Higher Education Proclamation, Education Sector Development Program (ESDPs), Ethiopia's Science, Technology and Innovation policy, and National Growth and Transformation Plan (GTP).

5.1. Education and Training policy

The Government of Ethiopia developed an Education and Training Policy (ETP) and Education Sector Strategy in 1994 (Transitional Government of Ethiopia, 1994). The main goal of this education and training policy was the cultivation of citizens with an all-around education capable of playing a conscious and active role in the economic, social, and political life of the country at various levels. The policy's goals, strategies, and programs were expressed in the policy text as designed to address the problems of access, equity, quality, and relevance in education. As an overall educational strategy, the basic policy on each of the following was stipulated: curriculum, educational structure, educational measurement and examination, teachers, languages and education, nexus between education, training, research and development, educational support inputs, educational organization, and management, and educational finance (TGE, 1994).

This policy urges higher education at diploma, first degree, and graduate levels, to be research-oriented; enabling students to become problem-solving professional leaders in their fields of

study and in overall societal needs. The policy's expressed objectives directed towards higher education institutions were as follows:

- i) To make education a supportive tool for developing traditional technology, and for utilizing modern technology.
- ii) To make education, training, and research be appropriately integrated with development by focusing on research
- iii) Create a mechanism for an integrated educational research, and overall periodic evaluation of the educational system, whereby a wide-ranging of participation is ensured to foster appropriate relationships among the various levels of education, training, research, development, and societal needs, maintaining the required standards
- iv) Cultivating the cognitive, creative, productive, and appreciative potential of citizens by appropriately relating education to the environment and societal needs.
- v) Developing the physical and mental potential as well as the problem-solving capacity of citizens (TGE, 1994: 8)

The first and second objectives state that education should be a tool for developing and utilizing technology and that education, training, and research should be appropriately integrated with the country's development goals whilst the third, fourth and the fifth objectives address the production of problem-solving citizens and being responsive to environmental and societal needs. As can be recalled from the literature, addressing societal needs is one wing of UTM-social engagement. Social engagement is, as discussed so far, about working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people. Moreover, social engagement is a powerful vehicle for bringing about environmental and behavioral changes that will improve the condition of the community and its members (Wedgwood, 2006).

5.2. Higher Education Proclamation

A proclamation is an official announcement from a state or organization dealing with a matter of great importance, such as a declaration (<https://en.oxforddictionaries.com/definition>). In Ethiopia, the first higher education proclamation was set in 2003. This proclamation was the first in the history of the country in legalizing and setting foundations for the overall direction of the sector. Six years later, the government again issued the second Higher Education Proclamation in Sept 2009 (Wondwosen, 2011). Even though there are some changes and modifications between the two proclamations, the issues raised regarding UTM are all the same. Thus, this review revolves around the recent (the 2009) proclamation.

The proclamation has named UTM as one of the main responsibilities of higher education intuitions. On its Article 19/1, the proclamation states, “unless specifically established otherwise, the core business of any institution shall be to offer education and training through regular programs, conduct research, and render community services”. In the same vein, on its Article 8/1, the proclamation asks higher education institutions to “undertake and encourage the relevant study, research, and community services in national and local priority areas and disseminate the findings as may be appropriate; undertake, as may be necessary, joint academic and research projects with national and foreign institutions or research centers” (MoE, HEP, 2009:6). As can be seen in this statement, community service and dissemination of research results, which are the main elements of UTM, are clearly included under the main responsibilities of higher education institutions.

This proclamation also urges research in Higher education institutions to focus on the country’s development agenda and on technology transfer. On its Article 24/1, it says “the focus of research in any institution shall be primarily on promoting the relevance and quality of education

and on the country's developmental issues focusing on the transfer of technology'' (MoE, HEP, 2009:19). This article stipulates that UTM is what universities should be for. This is emphasized in article 24/3a, where the proclamation urges higher education institutions to undertake research that takes into account the priority needs of the country and enables it “to solve its challenges and build its capacity through technology transfer” (MoE, HEP, 2009:20).

In 24/4, the proclamation informs higher education institutions to conduct research jointly with national and international institutions, research centers, and industries. And on Article 26/6, a university is expected to be at the service of the wider community and to give consultancy services. In essence, these articles highlight the importance of University-Industry linkage and technology transfer. University-Industry linkage and technology transfer such as generating technological spillovers, patenting, licensing and the generation of spin-out companies are, in turn, the common elements of UTM (Molas-Gallart et al. 2002).

In the proclamation, due emphasis is thus given to technology transfer, University-Industry linkage, consultancy services, and community service activities of the universities. These activities, as to scholars in the area, are at the heart of UTM (Wedgwood 2006; Molas-Gallart & Castro-Martinez 2006; OECD 2007). Put differently, the proclamation identifies UTM as a tool for solving societal problems and bridging higher education institutions and the society (Molas-Gallart et al. 2002; Montesinos et al. 2008).

5.3. Growth and Transformation Plan (GTP)

Since 2015, Ethiopia's Growth and Transformation Plan II (GTP II) has formed the country's overarching development strategy and policy framework. The GTP II is the country's fourth macro-economic development program since 1995, all of which have focused on poverty

alleviation. The success of GTP I (2010-11 to 2014-15) heavily influenced the formation of GTP II, which draws on the SDGs and regional and international economic collaboration initiatives.

The major objective of GTP II is to serve as a springboard towards realizing the national vision of becoming a low middle-income country by 2025, through sustaining the rapid, broad-based, and inclusive economic growth, which accelerates economic transformation and the journey towards the country's Renaissance.

The main strategic direction that is being implemented during GTP II is improving educational participation, quality, and relevance at all education levels. This is being done by implementing on the educational development package in a coordinated and organized manner, expanding functional adult education, and providing special support for emerging regions for equity in access to education. In general, the second growth and transformation plan considered and mainstreamed all relevant elements of the post-2015 development agenda and Agenda-2063 concerning education and technological development (FDRE, NPC, 2015).

Regarding the higher education sector, the direction for the five years (2015/16-2019/20) plan is to ensure quality and relevance in the public and private higher education institutions. The plan has an ambition of creating a national higher education research directive and framework focused on technology transfer, which as discussed above, is one of the main aspects of UTM.

5. 4. Education Sector Development Program (ESDP V)

In order to realize the Education and Training Policy of Ethiopia, four Education Sector Development Programs (ESDP I - ESDP IV) were developed and implemented. The fifth ESDP (2015/16 - 2019/20) is on the implementation process. This program depends on the Growth and

Transformation Plan (GTP) of Ethiopia. The program is expected to address the current challenges of education (AAU, Community Engagement Framework, 2017).

Higher education is one of the priority programs in ESDP V. The goal set for higher education institutions in ESDP V is:

to produce competent graduates who have appropriate knowledge, skills, and attitudes in diverse fields of study; to produce research that promotes knowledge and technology transfer based on national development and community needs; and to ensure that education and research promote the principles of freedom in exchange of views and opinions based on reason, democratic and multicultural values. (MoE, ESDP V, 2015:25)

As can be seen from the above paragraph, ESDP V emphasizes research and technology transfer. It also urges higher education research to focus on national development and community needs. This is central to UTM as UTM tries to create ties between the university and larger society (Molas-Gallart et al., 2002). This document clearly urges universities not to narrowly focus on producing qualified experts, rather to also focus on identifying and solving the pressing societal problem (MoE, ESDP V, 2015).

In ESDP V, the higher education priority area has six components: (1) University expansion and consolidation, (2) Equity enhancement, (3) Relevance and quality enhancement, (4) Research, technology transfer, and community engagement, and (5) Institutional collaboration, leadership, and governance. Of these five priority areas, the fourth is devoted to UTM, of which the ESDP V states the following:

In line with the strategies for strengthening university-industry partnerships in teaching and learning, universities will work more closely with industry stakeholders to set the research agenda, improve research processes and cultivate stronger links

between knowledge and practice. The emergence of more effective partnerships between businesses and education institutions, such as establishing a science park with incubation units, will improve technology transfer and may be a source of generating additional revenue for universities. (MoE, ESDP V, 2015:15)

The above statement fits with the three areas of UTM identified in research by Laredo (2007) but it also presents the University-Industry partnership for technology transfer as key also for generating revenue for universities. In line with this, OECD (2004) states that universities ought to fill the funding gap by generating new revenues using their third mission. This includes, “using existing asset bases, increasing commercialization activities (patents and spin-offs) and income-generation activities such as consultancy” (OECD, 2004:14). ESDP V also requires universities to work with the community so as to identify and solve societal problems. It says “there should be a clear impact on communities through engagement and research, which meet national and institutional priorities, linked to the national development plan” (MoE, ESDP, 2015: 18). Apparently, this shows that UTM is one of the focus areas of the document.

5. 5. Ethiopia’s Science, Technology and Innovation policy

Ethiopia’s Science, Technology, and Innovation Policy (STI) policy of Ethiopia has seven major objectives. It focuses on:

- (a) Establishment and implementation governance framework and National Technology Capability and Transfer (TeCAT) system,
- (b) Technology learning and adaptation,
- (c) Indigenous knowledge and technologies,
- (d) National science and technology landscape and actors in the national innovation system,

(e) Coordination of STI activities with other economic and social development programs and plans, and

(f) Strengthening the role of the private sector in technology transfer.

In this policy, depending on the main STI problem, analysis, and assessment, eleven critical policy issues are identified: Technology Transfer, Human Resource Development, Manufacturing and Service providing Enterprises, Research, Financing, and Incentive Schemes, National Quality Infrastructure, Universities, Research Institutes, Technical and Vocational Education and Training (TVET) Institutions and Industry Linkage, Intellectual Property System, Science and Technology Information, Environmental Protection and Development, International Cooperation. For the purpose of this study we only look into (i) the technology transfer, (ii) Intellectual Property System and (iii) universities, Research Institutes, TVET Institutions and Industry Linkage.

5. 5.1. Technology transfer and Intellectual Property System

In Science, technology and innovation policy, it is indicated that most technology transfer activities in the country are not in line with the envisaged technology demands of development programs (FDRE, STI Policy, 2012) and that to fulfill the country's economic demand, the technology transfer issue is formulated to devise a system of learning, adapting and utilizing as well as disposing of imported technologies to support development needs. There are five strategies to implement the technology transfer issues in the country. The strategies indicate:

How to create capabilities of adaptation and utilization of manufacturing and service providing enterprises by establishing and implementing a system to search, select, import effective technologies, adapt, utilize as well as dispose; establishing and implementing a system to use foreign direct investment (FDI) and other ways of

supporting technology transfer. Strengthen technology transfer and wide use of intellectual property, standards, and other related information in support of technology transfer. (FDRE, STI Policy, 2012:5)

Here the policy emphasizes technology transfer activities of the country in general but it also talks about intellectual property rights:

Establish and implement a system that ensures effective protection of indigenous genetic resources and IP assets of the nation. Besides bringing benefit out of them; Develop and implement the application of IPR systems at national and institutional level; Strengthen and implement copyright protection in such a way as to encourage and promote creative works; Strengthen trademark protection to create a healthy and competitive environment among manufacturing and service providing enterprises. (FDRE, STI Policy, 2012:8)

5.5.2. Universities and Industries Linkage

Core actors in the national innovation system are identified as universities, research institutes, TVET institutions, and industries. It has also been mentioned that establishing linkages among these institutions is very important (p.8). When it explains the importance of university-industry linkage, the policy states:

Universities...and Industries are the major actors in the national innovation system. The strength and productivity of their linkages depend on the orientation and capacity of the actors to be innovative. ...the linkage to be strengthened with a two way technological flow between the universities and the industries. Their joint efforts shall be focused on identifying technologies and their sources, understanding the technologies through learning-by-doing and adaptation of these technologies. Creating a synergy of Universities, GRIs, and Industries in imitating, adapting, and generating appropriate technologies through the establishment of strong linkage shall be an urgent task. (FDRE, STI Policy, 2012:9)

Strategies that are intended to help implement these policy directives are forwarded. These include: (i) establishing a system that integrates and synergizes technology transfer issues; (ii) creating a conducive environment for university academia and students; (iii) creating strong linkages among actors and establishing a system that enables universities to provide an advisory role to industry.

Generally, according to STI policy of Ethiopia, the country's Higher education institutions are considered core actors in the national innovation system. This expressly calls for shared efforts of post-secondary education and research institutions and industries to focus on activities dealing with technology transfer. Furthermore, the policy recognizes that Ethiopia's intellectual property system can play a valuable role if it contributes to technology transfer and technological capability building through foreign direct investment and technology licensing. In other words, even though, the policy does not directly mention the activities of technology transfer as UTM, it has discussed the UTM agenda in detail.

An official from the MoSHE was also interviewed aiming to check and deepen insights emerging from the policy content analysis. This official is from the office of the directorate for Research, Technology Transfer, University-Industry Linkage, and Community Services under the ministry. The semi-structured interview with this official is categorized under three themes: The missions of universities, national policies and conceptualization of UTM, Support from the Ministry, and Challenges and Opportunities.

The officer was asked about the missions that universities are expected to achieve. Accordingly, he states that there are mainly three missions for the universities in the country: teaching and

learning, research and community service, and engagement. Regarding the mission of the university, he states:

...not only in Ethiopia, nowadays, universities all over the world mandated to achieve three missions: education, research and community service, and engagement. Actually, we think that these missions are interrelated... we expect our universities to be committed to these three questions. (MoSHE, March 18/2019)

Furthermore, being asked how the third mission is conceptualized at the ministry's level, the interviewee states:

The direction we have as MSHE for the universities is to have a framework for community service and engagement as UTM...when service and engagement are integrated we can include consultancy, capacity building training, technology transfer, university industry linkage and others can come under the same domain which ease the implementation process...by the way, we tried to put technology transfer and entrepreneurship activities of the universities under the third mission on a framework we prepared in 2014. If you get the 2014 community service and engagement framework of MoE there are details of the strategies for UTM. (MoSHE, March18 /2019)

From the above response, it can be seen that the ministry of science and higher education has put three fundamental missions for the universities as their main focus area. These missions are teaching and learning, research and community service, and engagement and there seems to be a consensus at the ministry's level that there are confusions regarding what is counted as UTM or not. It can also be noted that the ministry has the desire to organize different activities of the university such as technology transfer and university-industry linkage under the term UTM. However, there is no such clear direction given for the universities hitherto.

On the agenda of the national policy environment for UTM, the interviewee believes that the issue of UTM has been effectively included in the national policies. However, he believes that there are some kind of discrepancies across some policies:

... for me, policy is not a problem for the UTM, rather the problem seems to be on the conceptualization of the term and on the commitment of the universities... I am sure that ETP and the proclamation recognizes UTM... also, I think all the ESDPs, particularly ESDP V has given due emphasis for UTM...Regarding the conceptualization, I know that there is no consistency on the policy documents...Some of the policies assume technology transfer and consultancy activities as the UTM while others say even university- industry linkage is also part of UTM...some others, on the contrary do not accept either technology transfer or university-industry linkage as UTM. (MoSHE, March 18/2019)

Asked if the universities are working in line with what is planned at the ministry level regarding UTM, he states that

...yes, I also got the opportunity to see some policy documents of our universities on UTM and different universities define it differently...I know that this should be cleared up but the problem is that these universities are not committed to implementing even the way they define it...For instance, the proclamation, as to my knowledge, gives a relatively good direction on UTM. ... Actually, we do not expect the proclamation to give detail of everything as this proclamation is for all higher education institutions. Universities have professionals on the area, so, it is mainly their duty to create clear conceptualization...I cannot say they are in line with the ministry since the ministry itself was not clear about the concept...we have done very little towards this mission when compared to the other two missions. (MoSHE, March 18/2019)

The interviewee expresses that the main national policies on education have given recognition to the UTM, but the universities have not given due attention to the issue. He believes that there are confusion on the conceptualizations of the term UTM on the policies, but thinks that the

universities should clarify the confusion regarding UTM as they have expertise in this area. He is also convinced that the ministry had not done enough on this mission when compared to the two traditional missions: teaching and learning, and research.

Regarding the adequacy of the support given by the ministry to the universities, he states that:

...the support we give for the universities in general is weak. The support on UTM is worse. This is due to different reasons. One of the reasons is that there was lack of well-qualified personnel in the ministry itself. Most of the time, what the ministry used to do is more of inspection than supervision...now, we are trying to hire well qualified personnel who can create good system from which most of the universities may benefit...regarding the third mission, we have now prepare a directive regarding this mission and others. Once we finished, I think, things will have a different shape...then we are planning to create a Higher Education Research and Community Service Council where the vice presidents of public and private universities mainly participate. (MoSHE, March 18/2019)

On the issues of budget, he states:

We are discussing with the university officials to have a clear and proper budget plan for UTM... the problem we have with most of the universities is that even if they plan for the third mission they use this budget for other activities...this might come out of the misconception regarding the mission...the directives I told you will help us a lot in this regard. (MoSHE, March 18/2019)

As can be implied from the words of the official, the support given by the ministry for the universities was scant. He thinks that they are now on the way to revitalizing the issue of UTM. He also stated that the fact that the MSHE was established independently has given them additional strength to focus on the universities.

The official was finally asked about the challenges and opportunities of UTM. He believes that there are many challenges to the UTM. Next to the problems related to the conceptualization of

UTM, the academic culture of the universities was stated as the main challenge. The interviewed official said that universities had been focusing mainly on teaching and research missions. The competition among the faculty members is still on producing quality research and publishes the research in an international journal. Hence, introducing the third mission as one main job of the faculty, as to the official, would not be an easy task.

He also stated that there was a lack of qualified staff in the ministry who can confidently support the universities on UTM. He emphasized that well qualified and experienced staff is very important when working with academics. He related this to the lack of clarity on UTM. As to him, had the staff been well qualified and experienced in the area of higher education, the issue of conceptualization of UTM could have not been a problem.

Another challenge that the official mentioned is the commitment of universities to embed the issue of UTM in their curriculum and programs. He further states that financial constraints may be raised by the universities as one of the challenges even if he is adamant that financial constraints cannot be raised as bottlenecks. This is, to him, due to two reasons: First, if properly implemented, UTM can be a source of additional finance. Second, even with the assigned budget from the government, effective things could have been done wisely. He states “even the budget that is assigned every year is no being used properly for the UTM.

Regarding the opportunities, he seems to be optimistic that things will be changed in the near future in the universities. He states:

...we have now prepared the important policies and directives for UTM. These documents will be disseminated to the universities to guide their practice and harmonize the activities of all the universities. The MSHE is established as an

independent ministry which helps to attract qualified individuals who are skilled and knowledgeable to supervise the universities. (MoSHE, March 18/2019)

5.7. Summary of Core Results on National Policy Environment vis-à-vis UTM

The national university proclamation and associated policies and programs seem to back the agenda of UTM. The proclamation for higher education clearly puts teaching, research, and community service as the first, the second and the third missions of HEIs respectively. Strengthening the community engagement activities of HEIs is also at the heart of ESDP V. Thus, the reviewed documents and the interview with MSHE reveal that there is an encouraging policy environment that supports the active engagement of UTM. The importance of such a policy environment is twofold: First, it gives universities a clear direction of their route towards institutionalizing UTM. Second, it is also indicative that the government assigns a budget for UTM activities, which ease the implementation of UTM activities.

However, problems of consistency in conceptualizing the third mission have been witnessed. The differences between community service, consultancy services or community engagement and technology transfer are not clear. The proclamation, for instance, treats “consultancy services and other supplementary activities” as the same concept as the community service (Article 26). This proclamation does not use the term community engagement. The ESDP V on its part merge research, technology transfer, and community engagement as complementary concepts (P: 102). Unlike the proclamation, ESDP V does not use the term community service to indicate UTM. The GTP II, on the other hand, emphasizes the technology transfer aspect of UTM (P: 185). Over and above, as to the interviewee from MSHE, technology transfer and any entrepreneurship activities of the universities can be graded as UTM. This, in other words, means that different

data sources have different conceptualizations or it can safely be said that their conceptualization of UTM could not be clearly found.

In addition to the problems related to conceptualizations, it seems like little attention is given for UTM on these documents (national policies, proclamations, and programs). Almost all the reviewed documents give relatively fair detail of discussion on the universities' first and second missions. However, the details given regarding UTM are relatively poor. For instance, the proclamation gives, a relatively, detailed explanation on the two traditional missions of HEIs: teaching and learning, and research (Articles 23 and 24 and 25). Then, it mentions community service as UTM (Articles, 4/4, 8/3, 19/1, 32/1a), but no article tries to explain what constitutes community service (UTM). Article 26 is entitled "consultancy and other supplementary activities. So, the question here is that is consultancy considered as a community service? or did supplementary activities represent community service? or both?

Besides, Article 30/5 states that "there shall be national standards for teaching and research loads which is applicable in all public institutions". Here, community service (UTM), has not been given space to be considered as one main load of the faculty. On another page of this proclamation, conducting community service has been firmly written as one of the main responsibilities of an academic staff along with research and teaching. Asking faculty to conduct community service on one hand and not assigning community service load for the faculty, on the other hand, could not be rational.

Even though policy documents at the national level are not expected to spell out every detail of a policy unit, there should have been some general directions on what constitutes UTM. The proclamation, particularly, should have specified this mission as this document is directly related

to the higher education sector. This problem, coupled with the absence of a clear conceptualization of the UTM may put challenges on the institutionalization of UTM at the institutional level for universities and other higher education institutions.

CHAPTER SIX: INSTITUTIONALIZATION OF UTM AT ADDIS ABABA UNIVERSITY

Three sub-themes, which I proposed (based on the analytical framework) to be indicators of the institutionalization process, are presented under this main theme. The first theme discusses the institutional orientation of AAU towards UTM. Second, institutional support will be discussed. Finally, stakeholders' (community partners, and faculties) awareness on, involvement in and support for UTM will be explored. However, before starting the discussion of the institutionalization process of UTM at AAU, brief institutional context is presented.

Following the recent restructuring of its institutional setup and governance system, Addis Ababa University has currently ten colleges, four institutes that undertake both teaching and research activities, one academy, and six research institutes that are predominantly engaged in research undertakings. The reform undertaking in the university has resulted in a paradigm shift in the vision and mission of the university, which underpins research and graduate studies (AAU, General Information, 2016).

Addis Ababa University has been expanding its academic programs over the past few years to meet the growing demands for educated personnel in the country. Currently, AAU has a total student enrolment of over 55,000 and over 8000 staff (2833 academic and 5385 supportive staff). It runs 77 PhD, 170 Masters, 18 specialty and 21 sub-specialties as well as two fellowships (AAU, Education Statistics Annual, 2017).

6.1. Addis Ababa University's Institutional Orientation Vis-à-vis UTM

In accordance with the analytical framework, Addis Ababa University's institutional orientation consists of two main components: conceptualization of UTM at the universities, and integration of UTM in the universities' mission statement. These topics will be discussed in detail in order to explore the process of institutionalization of UTM at AAU.

6. 1.1 Conceptualization of UTM at AAU

In order to explore how UTM has been conceptualized at Addis Ababa University, five semi-structured interviews were conducted with five officials who are working in this domain. In order to explore their conceptualization of UTM, participants were asked three questions: 1) Please tell me the mission (s) of this university. 2) How do you define the third mission? 3) Can you please list the main dimensions (components) of UTM in your university? In addition to this, the policy documents on community engagement and university-industry linkage and technology transfer of the university were reviewed. The qualitative document review on these documents was also made based on the following questions: Do the policies talk about the missions of the university? Do these policies state to which university's mission they belong? Is there a clear definition of UTM in these documents? Do these documents suggest the categories or dimensions of UTM?

This exploration has three basic purposes: First, it helps me to shape the way I approach the quantitative part of this study. Second, when conducting key informant interviews with community partners of the universities, would ease the communication between the researcher and the key informant interviewees. Third, it is a basis for other indicators of the

institutionalization process. Hence, the forthcoming paragraphs discuss the results of these interviews and document review.

To begin with the interview, the officials were from the office of the vice president for research and technology transfer, the office of community service, and office of university-industry linkage and technology transfer, the office of Continuing and Distance Education, and one from previous officials working on the area of community service. These participants were labeled as PVP, PCS, PTT, PCE, and PPCS. Regarding the first question (please tell me the mission(s) of this university), all the five interviewees stated that their university has three main missions: teaching and learning, research, and community service. No interviewee seemed confused or uncertain about the missions of the university. Confusions, hesitations or uncertainties were observed when the participants were asked the second question (how do you define the third mission?). Since all the participants stated that UTM is community service, they were asked to define what community service means in their university. However, none of them can clearly express their views. They rather preferred to list some of the activities they think are related to community service activities. According to PCS, UTM is:

...Our university has three core missions. These are teaching, research and community service... for me UTM is the community service activities of the university...I know teaching as the first and research as the second missions of the university... in our university, teachers in different colleges and departments develop proposals for conducting community service and we evaluate and assign funds for the proposals....this is what we call it community service. (PCS, 22 March /2019)

From this response, it can be seen that what this interviewee believes to be community service (UTM) is the traditional service outreach activities done by faculty in the form of short-term

capacity building and knowledge transfer. The response of PTT is not also far from what is mentioned by PCS. He states:

... Every higher education institution in the country has three fundamental missions:i) teaching-learning ii) research iii) community service... we commonly call the community service mission of our university as the 'third mission'...if I am asked to define it; I can say that it is the services that the university offers to the surrounding community... ok, community service?... even if I am not sure, I think that it is the contribution from teachers and students to the local community. (PTT, 20 march/2019)

PCE on his part state that he is not the one to be asked about the definition of UTM as he believes that his duties are not related to the UTM. He states:

...we have three main missions: teaching, research and community service...it is difficult to define it as you asked me suddenly...I think it is written in the policy, but I can tell you that it is related to the community service activities of the university...it is also better to present this question to the community service director....if you ask me to define community service, I think it can be the activities of the university which are aimed at supporting the external community through trainings and consultancy services...but I am not sure. (PCE, 2 April/2019)

PVP explains that defining UTM is a challenging task and states that he thinks that the term is too broad: broader than community service. He says there are confusions in using terms like community service or engagement. When defining UTM he said:

...as stipulated on the proclamation, there are three missions for any higher education institutions. These missions are: Teaching and learning, research and community service...I do not think there is a clear definition on UTM even at national level. For me UTM is the activities of the university related to social problem solving....it includes community service and community engagement and volunteerism...nowadays we are being requested to use the term community engagement rather than community service even though the difference is not clear for most of us...community service for me is the work done by the university to solve the problems of society by engaging the community in the process. (PVP, 23 march/2019)

The interviewee who was selected from previous officials working in the area of community service (PPCS) has another perspective. Her definition of UTM is more general:

...I think there is no clear definition of UTM. However, for me, it is any activity of the university directed towards the society...but, when I say any activity, it does not include those activities of teaching and learning and research. These activities are not included under UTM...I am not sure about the exact definition, but community service is any voluntary activity of university staff...I think also technology transfer. (PPCS, 4 July/2019)

The interviewee expresses that there is no consensus on how UTM is defined in the university and that there are inconsistencies. This is also seen in the presentation of what UTM is by the interviewees, whose responses range from traditional outreach activities (PCS) or voluntary activities to community engagement (PVP), technology transfer (PPCS), capacity building training, and consultancy services (all bar PPCS). There are also comments relating to volunteerism services and university infrastructure and resource access, such as to the library, laboratory, and sport resources. PCE states that UTM

...mostly related to the consultancy services and capacity building trainings given by faculty members, student, and other staff volunteerism can also be considered as UTM. (PCE, 2 April/2019)

PVP also states that any activity aimed at helping society using the resources of the university can be classified under UTM. He states:

...UTM includes all community service activities, technology transfer, like trainings given by the university professors to different stakeholders, consultancy services, donation of books and other materials given to schools, free legal advising services, free health services by staff and students of the university and so on. (PVP, 23 March/2019)

PPCS adds technology transfer activities to the already mentioned dimensions of UTM. He says:

...community service activities such as trainings, consultancy services, technology transfers, opening the infrastructure of the University for the Public Use, volunteerism, helping the poor can all be classified under the third mission. (PPCS, 4 July/2019)

When asked to list the main dimensions of UTM, the participants' statements varied and there were only a few things in common. One of these was consultancy and capacity building training and the other was that the concept of UTM inclines towards the traditional one-way community service aspect from the university to the community. One of the officials included technology transfer as one aspect of the community service mission that is rejected by another interviewee who said "with no doubt, technology transfer is the research mission of any university...you can't transfer technology if you do not have a research outcome" (PCE). Community engagement is also one of the terms used by one of the interviewees who unfortunately was not sure about the difference between community service and community engagement. This lack of clarity is however also present in the AAU Community Engagement Framework documents as well. This document expresses that community service is UTM at Addis Ababa University. On page 9 we can read that:

Community service is one of the three missions of Addis Ababa University. However, like any other universities in Ethiopia unequivocal attention is given more to the two missions (teaching and research). (AAU, Community Engagement Framework, 2017: 9)

Almost the same kind of statement appears also on pages 11 and 12:

Addis Ababa University may not be prepared, in the near future, to create a community engagement system integrated into its curriculum and research programs (as is nationally desired; or as is the case in Jimma University). It can however, create a strong community engagement program as the third arm (together with teaching and research) by creating relevant structures and good governance systems.(AAU, Community Engagement Framework, 2017:11)

On the next page, this statement is repeated:

Higher education institutions are entrusted with three statutory missions of teaching, research, and provision of community service. Their primary mandate is to serve as dynamic centers of capacity building focusing on critical issues of relevance and quality of education and research to contribute with efficacy to the Ethiopian peoples' aspirations of peace, democracy and development. Accordingly, offering education and training through regular programs, conducting research, and rendering community services is the core business of higher education institutions. (AAU, Community Engagement Framework, 2017:12)

A stronger statement comes at the middle of the framework:

To properly position community engagement as a third mission of the University and make it part of the regular planning of academic units, a culture of community engagement should be developed in the university staff and students. (AAU, Community Engagement Framework, 2017: 16)

When trying to give emphasis on giving value to UTM, the framework states the following:

Hence, to improve involvement of academic units in community engagement activities, and to help the third mission complement the mission of teaching and the mission of research, a workload, equivalent to 3 credit hours in one year is proposed for community engagement involvements by academic staff of the University.(AAU, Community Engagement Framework, 2017:19)

It can be concluded from the above quotations of the policy that community service is the name given to UTM. Even though the policy document uses terms like community engagement, community outreach, and community service interchangeably, it, predominantly, use community service as UTM. In this document, community service is defined at two places: on page 3 and on page 10. The first definition on page 3 states as “the delivery of research outputs/innovative ideas targeted at community development”. On page 10 it says, “the delivery of research outputs/innovative ideas by academic staff targeted in community development” These

definitions of community service are ambiguous and can have two interpretations. The former does not mention the source of research outputs or innovative ideas i.e academic staff or students or other sources while the later includes academic staff as the source of research outputs/innovative ideas. On top of that, the definitions are, by and large, related to the technology transfer aspect of UTM, which the university does not consider as community service.

Other documents that were reviewed with aim of understanding how UTM has been conceptualized at AAU are “the establishment document for Addis Ababa University pilot technology business incubation center and Intellectual property Right Policy”. Both documents were produced by the office of university-industry linkage and technology transfer.

Unlike the community engagement policy, both the intellectual property right (IPR) policy and establishment document for technology business incubation center do not mention to which mission they are accounted for. However, from the objectives stated by the IPR policy, it can be seen that the role between the community service office and the office for university-industry linkage and technology transfer are muddled. For instance, let us look at the following objectives from IPR policy of the university:

Promote, support, protect and disseminate scientific investigations and research out puts, which are beneficial for the steady progress of invention, innovation and creativity thereby promoting science and technology in the country. (AAU, IPR Policy, 2016: 3)

This objective seems to be the replica of the definition of community service (“the delivery of research outputs/innovative ideas targeted at community development”). But the question is that if the objectives of community service and IPR are the same, what is the importance of having a

different name for the same concept? Why have these two items not been treated as interrelated activities managed by the same office?

Similarly, the main objective of establishing Addis Ababa University Technology Business Incubation Center (TBIC) is to facilitate the commercialization of research output and promote effective technology transfer. Let us see the first and the second objectives of the document:

Objective 1:

To strengthen the local economy through enhanced knowledge and technology transfer from university research units to the industry.

Objective 2:

To enhance the income of the university through commercialization of the research outputs and further strengthen the research activity in relevant industrial problems. (AAU, TBI Policy, 2013:5)

Like the objectives of IPR policy, these two objectives, though not stated in the policy document, are designed to achieve the third mission of the university (UTM). When we look at these two objectives and compare them with the definition given to community service of the university, one can hardly find distinction.

6.1.2. Integration of UTM in the Mission Statement

Mission statements express the scope of operations and reflect an organization's values and priorities. For instance, Harrison (1987) defines "mission statement" as a comprehensive organizational articulation that describes the organization's aim, purpose for answering the question of why are we here.

Addis Ababa University has clearly indicated UTM as one of the core missions of the university in its five years strategic plan. The university has a mission

To produce competent graduates, provide need-based community services, produce problem-solving research outputs, and play a pivotal role in technology creation and transfer through innovative and creative education, research, and consultancy services to foster political, social, and economic development of Ethiopia. (AAU, Community Engagement Framework, 2017: 9)

In the above mission statement of AAU, all the three core missions of higher education institutions (teaching-learning, research, and UTM) are clearly stated. The university aims ‘to produce competent graduates’ and ‘problem-solving research output’ regarding the first (teaching and learning) and second (research) missions and concerning UTM phrases like ‘to provide need-based community services’, ‘play a pivotal role in technology creation and transfer’, and ‘consultancy services to foster political, social, and economic development of Ethiopia’ are used. This shows that AAU has given UTM a due weight on its mission statement and that UTM has been embedded in the mission statement of the university

6.2. Institutional Support

Institutional support factors play a major role in enabling effective policy development and enactment. A range of institutional factors are important, including liquidity, the reliability of services, and the availability of information and organizational structure. As per the analytical framework, here, I will discuss three key aspects: Policies and strategic documents on, approaches and coordination towards, and leadership and support for UTM at AAU.

6.2.1. AAU’s Policies and Strategic Documents on UTM

Under this sub-theme, the university’s community engagement framework, Intellectual Property rights policy and Technology Business Incubation Establishment document, strategic plan, and the Senate legislation will be reviewed.

6.2.1.1. AAU's Community Engagement Framework

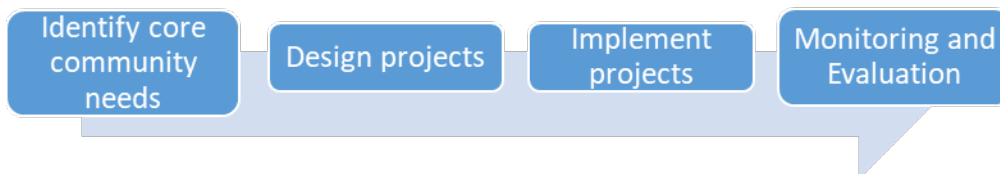
The policy for community engagement was formulated with the general objective of providing a framework for the provision of effective community service by various academic units of the University with the active involvement of the academic staff. The policy, then, goes on to define community service, it rather ambiguously, (“the delivery of research outputs/innovative ideas targeted at community development” and the delivery of research outputs/innovative ideas by academic staff targeted at community development”) (AAU, Community Engagement Framework, 2017:3). These ambivalent definitions would complicate the implementation of community service in the university. Without clarifying the objectives, the policy goes on the strategies for achieving this objective. These strategies are:

- i. Create and support an organizational infrastructure that promotes community engagement,
- ii. Cultivate a culture of community engagement in the university staff and students,
- iii. Build stronger community partnership that benefits the university and the community,
- iv. Work with academic units to assess core community needs,
- v. Design, implement, evaluate and control projects that serve and engage the community,
- vi. Advocate volunteerism; Search and apply for community engagement funds.
(AAU, Community Engagement Framework, 2017: 14)

It can be implied from the above strategies that the interplay among university officials, the community, and the academic unit is key to building successful community service activities in the university. This interplay is explained in the community engagement frameworks as follows: The University's office for community service in collaboration with the academic units are

mandated to assess and analyze the core community needs. Based on these core community needs, project will be designed and implemented in collaboration with community partners. Generally, The University has produced a framework which it thinks would guide the implementation of community service in the university.

Figure 4: steps in conducting community service at AAU



Source: AAU Community Engagement framework. (2017)

6.2.1.2. The University IPR and TBI

Addis Ababa University (Office of University-Industry Linkage and Technology Transfer) has also produced policies for Intellectual Property Rights (IPR) and Technology Business Incubation (TBI). The IPR policy has been framed to facilitate the transfer of technology from AAU to the industry in order that research conducted at the University results in applications that would benefit the public. It is also aimed at promoting, supporting, protecting, and disseminating scientific investigations and research which are beneficial for the progress of invention, and creativity thereby promoting science and technology in the country.

The objective of AAU-TBI is also almost similar to the objectives stated for the IPR policy. The general objectives of this document is to strengthen the local economy through enhanced knowledge and technology transfer from university research units to the industry and to enhance the income of the university through commercialization of research outputs. Simply put, AAU-TBI is an extended form of technology transfer aimed at scaling up small enterprises by

providing working space, technological support, and training for entrepreneurial skill development.

6.2.1.3. AAU's Strategic Plan Vis a Vis UTM

Strategic planning sets a medium-term timescale, usually over three years (Rowley & Sherman, 2001). Sallis (2002) states that the aim is to give the institution guidance and direction through strategic choices that can help an institution to develop and sustain a competitive strategic advantage (Rowley & Sherman, 2001). Colleges and universities that align their mission with their educational policies and programs generally are more effective and efficient (Birnbaum 1991b; Bolman & Deal 1991). Strategic goals are expressed as motivating, especially if they incorporate central aspects of the vision of the institution and are understood to be testable hypotheses, not rigid formulae (Morrill, 2007). Addis Ababa University prepared a five-year (2015-2019) strategic plan based on national policies and programs, i.e. the Education and Training Policy of the nation, ESDP-V, and Higher Education Proclamations. The strategic plan was prepared with the aim of guiding AAU in accomplishing its mission of providing high-quality education, undertaking problem-solving research and knowledge generation, and delivering transformative community services (AAU, Strategic Plan, 2015). But, the following are identified as weaknesses related to community service and partnership of the university:

- i. Lack of institutionalized way of cultivating the spirit of voluntarism and community services
- ii. Inadequate logistical support
- iii. Lack of clarity of the concept of community service (E.g. no distinction between income generation and voluntarism) among University community
- iv. Unorganized efforts in coordinating community services
- v. Low involvement in community services activities
- vi. Lack of proper identification of community service needs

- vii. Lack of Inter-University Joint project on nationally oriented community service schemes
- viii. Limited diversification of community services
- ix. Inadequacy of incentives for community service provision
- x. Inadequate apprenticeship and industry-University partnership in pertinent academic programs
- xi. Weak internationalization of the University
- xii. Lack of strong alumni association. (AAU, Strategic plan, 2015:14)

AAU has a vision of becoming one of the top ten graduate and research Universities in Africa by 2025 and has identified four areas of excellence of which community service is one. Under this strategic theme, the University aimed at actively engaging in diversified and comprehensive community service delivery such as consultancy, project design, implementation, and evaluation, as well as outreach and public sector services with high standards and efficiency. The strategic plan describes the community service strategic theme as follows:

Under this strategic theme, efficient community service delivery is considered as a means of fostering sustainable growth and development in a community through appropriate initiatives. Hence demand-oriented community services in terms of capacity building, quality public services delivery and community engagement, participatory and consultative services will be undertaken. It also presupposes forging new alliances and strengthening existing partnerships with local and international partners. (AAU, Strategic plan, 2015: 35)

A strategic map, which the university believes to show cause-and-effect relationships and serve as a tool for communicating strategy has been prepared. The strategic map indicates the important strategic steps for creating an effective UTM in the university. The strategic plan has also placed due emphasis on the UTM and has aligned mission statements with their educational policies and programs, which are generally considered to be effective and efficient (Birnbaum 1991b; Bolman & Deal 1991). In turn, AAU's UTM mission statements are there as pillars of the strategic plan of the university.

6.2.1.4. Senate legislation

AAU has expressed its commitment towards UTM and visions of making this mission a routine activity for its academics. However, even though such commitment is promised at document level, AAU's legislation seems to be reluctant to legally tie down this commitment. For instance, the senate legislation announces that the university deploys academic staff for two traditional missions and deploys "its academic staff primarily as teachers, researchers, or a combination thereof on the basis of its research agenda and plan, demonstrable merit, and practicality, and stipulations which clarify debated areas". This gives recognition only to two traditional missions of the university: Teaching and research. Moreover, the legislation does not stipulate a workload for the academic staff to conduct community service (UTM). It does for teaching and research missions of the university while it says nothing about the workload of academics when conducting UTM (AAU, Senate Legislation, 2013:67). On article 59.2 of the legislation, it states "Without prejudice to Article 128.2 of this Legislation and unless otherwise stipulated in a contract of employment, the workload of academic staff shall respectively be 75 % and 25 % teaching and research". Regarding the issue of community service, it says "rules will be formulated which may attach the community service activities of the university to the academic load" (P. 70)

The legislation also gives little credit for community service in its promotion criteria for Academic staff. The promotion criteria for assistant professor, associate professor, and professor is presented as follows. (AAU, Senate Legislation, 2013: 40). The following tables summarize the promotion criteria for professorship.

Table 6: Promotion criteria for the rank of assistant professor

No	Criteria	Score
1	Effective teaching	37.5-50
2	Publication	35 – 45
3	Participation University affairs and/or professional and/or related and public service	12.5-25

Source: AAU, (2013): Senate Legislation of Addis Ababa University

Table 7: Promotion criteria for the rank of associate professor and full professorship

No	Criteria	Score
1	Effective teaching	26.5-35
2	Publication	34 – 45
3	Participation University affairs	12.5-25
4	Public service	7.5-15

Source: AAU, (2013): Senate Legislation of Addis Ababa University

There is no importance attached to UTM for promotion or the importance is very much undervalued. The legislation goes on diminishing the importance of UTM in the explanation it gives concerning staff promotion criteria. It states:

In all cases, an academic staff shall at least score half of the points allotted to participation in University affairs and professional and/or related public services, and the minimum points allotted to effectiveness in teaching/research and publications to qualify for promotion to the next academic rank. (AAU, Senate Legislation, 2013: 40)

The tenure criteria also privilege academic staff who effectively served the university in teaching and research activities. It states “Tenure is a privilege granted in recognition to staff for outstanding scholarly teaching, research or leadership achievements to encourage them to continue to excel in their respective disciplines”.

6.2.2. Approaches and Coordination of AAU towards UTM

Based on the interview with the five officials of AAU and the data gained from the different sources of the university such as the 2015/16 academic staff profile of AAU, community engagement framework of the university, and AAU’s website, this part discusses the approaches and organizational structure of UTM.

In Addis Ababa University’s organizational structure, there are four vice president offices under the office of the president: Office of Academic Vice President, Office of Vice President for Research and Technology Transfer, Office of Vice President for Administration and Student Support, and Office of Vice President for Institutional Development. The university believes that these top-level managements are supposed to help the university achieve its core missions of teaching, research, and community service (AAU, Community Engagement Framework, 2017). Thus, it is very likely for the universities to shape their organizational structure around these core missions.

Regarding the UTM, universities can think of UTM in different ways: for instance as merely an additional funding stream, as a concept to cover entrepreneurial and commercial activities, or as a way to refer to the need to make universities more responsive to societal demands by clearly addressing the possible relationships between university and society. It has been argued that the

connection of the university with society should not be understood as a separate mission (Laredo, 2007; Bender, 2008).

Addis Ababa University has all the three basic dimensions of UTM: Technology transfer and innovation, Continuing education, and social engagement. These three dimensions are clearly observable in the AAU's organizational structure. However, these three dimensions are not organized under the same management span. Social engagement and technology transfer and innovation are organized under the vice president for research and technology transfer. Continuing education, however, is organized under the academic vice president (AAU, General Information, 2016).

In Addis Ababa University's approach, both technology transfer, and continuing education are not considered as UTM. Community service/engagement is the only activity that is defined as UTM (AAU, Community Engagement Framework, 2017). The office of community service/engagement has not established a formal horizontal relationship with either the office of university-industry linkage and technology transfer or continuing education. The interviewee from the office of community engagement states (PCS):

...we have no formal horizontal relationship with either technology transfer & innovation, and continuing education offices...by the way, sometimes there is a confusion of role between technology transfer and community engagement activities... as to my knowledge, we have never seen continuing education as our concern. (PCS, 22 march/2019)

According to this response, the community service/engagement office of AAU is a separate office which only deals with rendering community service activities of the university. It has two ways of conducting community service. One is conducting community service activities based on the plan by the university. This means that the university plans on issues for community

service are based on different national priorities and recurrent societal problems. The second is by making announcements for academic staff to submit proposals on community service projects and the offices choose the best ones to be implemented. The office evaluates proposals from different faculties and makes decisions based on the priority areas of the university and the relevance of the project for the community. Explaining this issue, PCS states:

...most of the time, we conduct community service activities on preplanned issues by the university. Academics are also invited to come with their proposals on community service and we choose those proposals which are more relevant and feasible. (PCS, 22 March/ 2019)

UTM is more of a one-way community service activity from the university to the community.

PCS states this as follows:

...I cannot confidently say that there is a good involvement of the community in our community service activities...we are trying to create a strong committee under our office which can strengthen partnership of the university with the community...as you have seen, we changed the name of our office from community service to community engagement...community engagement is what we are aspiring for...if we create a good community engagement in the university, that will answer most of our questions since engagement is more of partnership. (PCS, 22 March/2019)

Community service/ engagement is the UTM mission of AAU, it is a one-way mission and it also seems also to be a mission that is clearly separated from the two other traditional missions of the university as the activities of the office of community service are not directly attached to the research and teaching mission and the office does not cooperatively work with the research and teaching activities of the university. As to the interviewee from the community service/ engagement office states:

...this is the way community service/engagement is defined in our university...this mission is not also stretched to academic units to be considered as one of the daily activities of the faculty and students...I cannot say that it is totally separated from the research or teaching mission as they are interrelated, but as we are not collaboratively

working with the office of research or others, it cannot be said that there is an integration among service, teaching and research. (PCS, 22 March/2019)

Based on the above discussions, it would be safe to conclude that the community service/engagement office of AAU is a separately organized office for UTM which has a rare interrelationship with the teaching and research missions of the university.

The second dimension of UTM, technology transfer, has also a very established office at AAU: the office of university-industry linkage and technology transfer (UIL-TT). Like the community service/engagement office, this office is under the auspice of the vice president for research and technology transfer, and the office is led by a director. The AAU's UIL-TT activities seem to be decentralized at some level as associate deans at the college level are assigned for this purpose. In other words, there are responsible associate deans for research, university-industry linkage, and technology transfer at every college in the university. Asked if this office is working in collaboration with the office of community service/engagement, the interviewee from this office (PTT): states

...honestly, we do not have such formal horizontal interactions with the office of community service... I believe it should have been there... sometimes we meet with this office in order to solve some confusion regarding some projects and budget issues...some of our activities almost the same and we discuss about that and how we use the budget. (PTT, 20 March/2019)

Here, the interviewee raised an important issue, role confusion as the distinction between community engagement and university-industry linkage and technology transfer activities of the university are blurred and clear leadership from the central organization in policy documents is scant. Leadership and clear guidance are crucial elements in gearing education systems towards sustainable change but what is confirmed by the interviewee is that these elements are lacking.

The interviewee was also asked if the office of UIL-TT is working with the office of continuing education. He stated:

...our office works with every office in the university, but we do not have a particular horizontal relationship with the office of distance and continuing education. I think it is an independent office under the academic vice president. (PTT, 20 March/2019)

It can be implied from this response that the AAU's UIL-TT office has no formal horizontal relationship with the office of distance and continuing education.

Another dimension of UTM, continuing and distance education, of AAU is organized under the academic vice president. This office is also a centralized one which is not integrated into the faculties' day-to-day activities. As to the interviewee from the office of continuing education, the associate deans for undergraduate and associate deans for postgraduate programs at most of the colleges are working in collaboration with the office of distance and continuing education. Moreover, in almost all departments where there is a continuing and distance education, there are coordinators who are accountable to the department heads. However, the interviewee believes that if the activity is to be effective, the office of distance and continuing education needs its own management span from the office to academic unit levels.

The office of continuing and distance education is under the academic vice president, but it follows a different organizational structure from the other two UTM offices (technology transfer & and social engagement), which are organized under the same vice president (vice president for research and technology transfer). It means that although continuing and distance education is normally placed under UTM, AAU has organized continuing and distance education under the first mission (teaching and learning). Asked if this has any impact, the interviewee from the office of continuing and distance education states (PCE):

...for me, I do not see any problem if it works like this because I feel distance and continuing education as an academic issue than community engagement...it is related to the teaching learning because the only difference is its modality...we teach in kiremt (Summer), distance or extension, that is the difference...I think structure does not have any influence so long as we are working under the same university and have the same goal. (PCE, 2 April/2019)

It can be inferred from the response of the interviewee that AAU has conceptualized continuing and distance education as its first mission rather than a UTM. However, the literature regarding UTM strongly relates distance and extension programs (continuing education) to the third mission of the university (Laredo, 2007). The rationale forwarded by this literature is that this program is intended to open access for part of the community who could not get the opportunity to attend regular university courses or for those who need on-the-job professional training (Schejbal & Wilson, 2008). The interviewee agrees that one of the main reasons for the universities to work on continuing education is to open access for the community who could not get the opportunity to directly enroll in regular programs, but he is adamant that the program is more of an academics than it is a UTM. He states:

...yes! it is a way of creating access for the community who could not get the opportunity to attend regular courses due to different reasons and do not forget that it is also way of generating income for the university...all our trainings are credit based and we award degree for the successful completion of the programs...one thing I raise as a community service may be that we give payment free education for the needy people if they have confirmation from their kebeles (local government office) that they are unable to pay for education. Every year we give this kind of opportunity. (PCE, 2 April/2019)

The interviewee has touched on two important points in the above response: First, continuing education as a creation of opportunity for part of the community members that cannot attend education regularly. Second, continuing and distance education as an income-generating job of the university. These two characteristics are the typical characteristic features of UTM(Eva

Carmen, and Fernando (2018). Continuing education as UTM is widely recognized as the development of the cooperation of the university with the public and private sector and international institutions through the execution of short and long term education-training programs in the fields of interest and research other than the ones on which taught courses are given, both at undergraduate and graduate levels, and development of various consultancy projects (Arslan, 2008).

When asked if AAU has non-credited short term and long-term training programs in collaboration with different community stakeholders, the interviewee states:

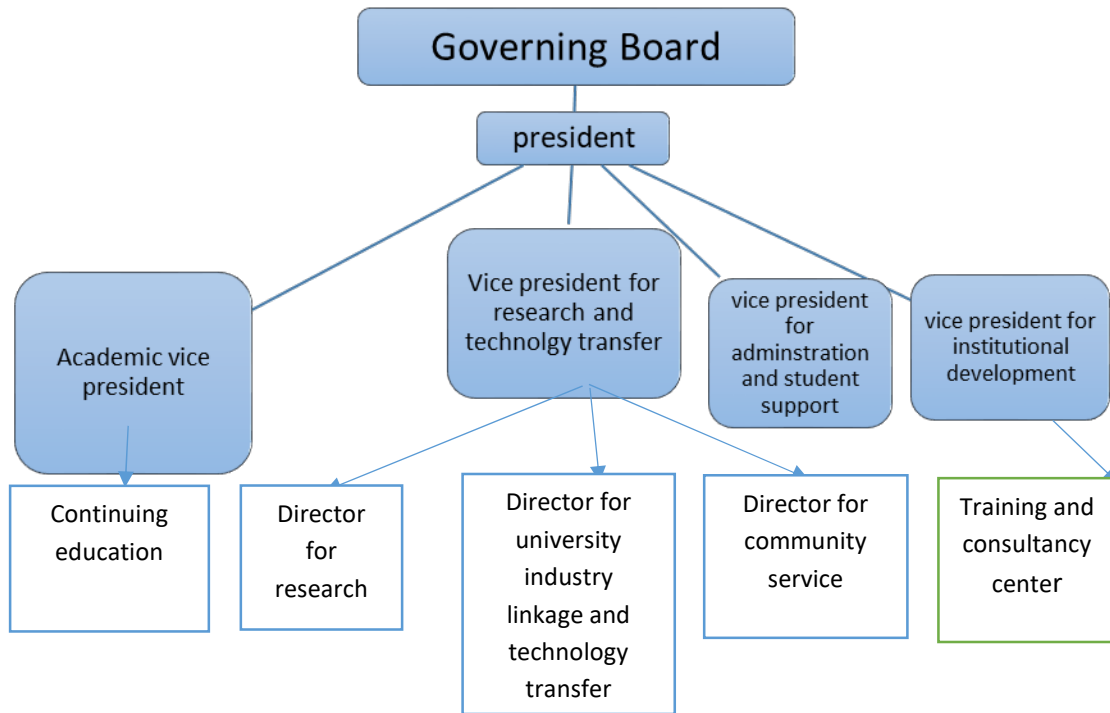
...so far, we have no such non-credited courses, we are thinking of starting things like that in a near future...I know the concept of continuing education also includes this kind of short and long term non credited courses. (PCE, 2 April/2019)

The interviewee seems to recognize that non-credited short- and long-term programs are at the heart of the concept of continuing and distance education. However, the office of distance and continuing education in AAU is only rendering credited courses which would be awarded diploma/degree on successful completion of training and this is being used as one of the incomes generating activity of the university and is also giving a chance for community members who could not afford to cover their educational expenses, the office will be effective if it collaboratively works with the office of community engagement.

In general, from the discussions on the approaches and organizational structure of AAU on UTM, it can be inferred that AAU has an established office for the three UTM dimensions - technology transfer, continuing education, and social engagement. However, the established offices are not organized under the same management span and there does not seem to be a clear

distinction between the role of these offices, particularly between the office of UIL-TT, and community service/engagement.

Figure 5: Partial organizational structure of AAU



Source: Charted based on AAU, (2017): Community Engagement Framework

The above organizational chart shows that UTM is organized under the vice president for research and technology transfer and that continuing education (one dimension of UTM) has been organized under the first mission of the university (AVP). University-industry linkage, technology transfer, and community service are organized under what the university call the “second mission”. Organizing UTM in different offices may not be a problem for the university. The problem happens if the horizontal relationship between these offices has not been well organized and at AAU the coordination seems to be rather fragmented.

6.2.3. Leadership and Support towards UTM

So far, we have discussed different aspects of institutional support towards UTM. However, all the aforementioned aspects would be meaningless if there was no commitment from the leadership of the university. The following section discusses about the leadership commitment of AAU towards UTM.

Interviews with the five higher-level officials of AAU regarding the leadership commitment of the university towards UTM were conducted. Almost all of them agree that the university was not such much concerned about UTM. But, they believe that there is now growing concern regarding UTM. As to these participants, the issue of UTM seems to be high on the agenda of AAU now as pressure is also coming from the government. However, they believe that there is a huge difference between rhetoric and reality. The participants are adamant that the practice is far from what is continuously preached by the university officials. As to these interviewees, even today, this mission of the university has not been seen as equal to the two traditional missions (education and research). The interviewees state that UTM is being considered as an activity which is done by the good-will of some faculty members and much of the work in UTM has not been well documented.

One of the big steps taken by the university regarding UTM, according to the interviewees, is the effort made by the university to produce a community engagement framework and other policy documents to guide the overall practice of UTM at the university. All of them believe that this action (producing important policy documents) shows, to some extent, the commitment of the leadership towards UTM.

All the participants of this interview, however, agree that even if there seems to be a concern in UTM in recent days, much of it has not been put into practice. Speaking on this issue, one of the interviewees (PPCS), stated the following:

...yes I agree that officials always talk about UTM at every place, on every meeting session and any media outlet. For me, it is being taken, more as a political agenda than a university mission. If the university is committed to its third mission, assigning time for the academic staff, incentivizing or rewarding the contribution of the staff is more than enough, but they do not do that... For instance, even if there is a small budget for our office, there is no clarity on how to use it. What the university does is just propagandizing the issue just for the consumption of media... yes, policies are developed, but they are tabled and not communicated to the academic staff.... We always hear the top management speaking about the UTM as if it was the university's top priority, but when the budget is assigned, the least is assigned for this mission (UTM). (PPCS, 4 July/2019)

He continues his ideas by singling out the assignment of the budget for the three missions of the university. He states his idea by comparing the three missions of the university as follows:

...we always hear the top management speaking about the UTM as it is the university's top priority, but when the budget is assigned, the least is assigned for this mission (UTM). (PPCS, 4 July/2019)

This idea is also shared by another interviewee, PCS, who further criticized the way the annual budget is assigned for the three missions. He states the following:

...finance has of great importance to achieve what you plan as an institution, the amount of money that is assigned for UTM is always very small when compared to the teaching and research missions. Even from this small budget, more than half goes to one or two faculties as if there is no UTM at the rest of the faculties...the remaining budget is also complicated to access. (PPCS, 4 July/2019)

These participants were also asked about the university's effort to involve the faculty, students and the external community in UTM activities. All the interviewees state that UTM has a problem in involving the faculty, students, and the community in the UTM. As to most of the participants, UTM was considered as the activity of some faculty members and the office of community service. PTT stated about this that:

...I think, so far, we have a big weakness in involving the faculty, students or the community in our activities. Very few staff members are doing community engagement activities, even these staff members are from two or three colleges...we have also a big limitation in involving the students in these activities...the worst of all is the cooperation we have with the community members for which we do UTM...we have also conducted research on this issue and found out that the university has a weak partnership with the community. Based on this, we are now trying to create a good partnership that will be strengthened in the coming one or two years...regarding teachers, yes the incentives are not enough but when we look at the bigger picture, engaging any of UTM activities can have a huge contribution for solving societal problems and this, I think is a professional and moral obligation. (PPT, 20 March/2019)

Another interviewee, PVP, states that even if there is involvement of the faculty, students, and the community, the involvement is not sufficient. Asked what is considered as sufficient, he states:

...I, even doubt if every teacher in this university has a piece of knowledge about this UTM. For sure, students know almost nothing about it. When we come to the community, some of the community that we are working with may know what we do, but the relationship is not based on partnership...generally, I can say that the involvement of these stakeholders is very low...which shows the lack of commitment from the leadership. (PVP, 23 March/2019)

Finally, the participants of this interview were asked about how the impact of community engagement projects are assessed and documented. Two of the participants are not sure about

how the community engagement projects are managed. The other two (PCS and PPCS) stated that most of the time once the community engagement projects are started, there is no strong monitoring and evaluation procedure to determine the impact of the projects. PPCS stated in addition that:

...as I mentioned before, most of the projects are initiated by interested academics and most of the responsibilities are given for these individuals. Thus, much of the work is not properly reported and its impact is not well measured. (PPCS, 4 July/2019)

Interviewee PCS on his part state the following:

...if the project is related to technology transfer since there is some kind of payment, that is documented...even in that case, there is no clear path of assessing and reporting about the project... for your surprise, some projects are directed independently by the college themselves while most of them are managed by this central office...we are also stranger to some of the community engagement projects when we hear them on some meetings. (PCS, 22 March/2019)

From the above discussions, it can be implied that there seems to be a real concern on UTM from the leadership of AAU in recent days. On the ground, however, there is a huge limitation in commitment of the leadership as much of the UTM activities seem to lack institutional shape.

6.3. Stakeholders' Involvement in UTM

The core stakeholders chosen for the current study are community partners and university teachers. The coming pages will discuss these two stakeholders' involvement in Addis Ababa University's UTM activities.

6.3.1. Community's Involvement in UTM

Four community partners whom AAU has identified to be its long-term partners have been interviewed regarding their involvement in UTM at AAU. These community partners are from

the Addis Ababa Youth Volunteers Association (CP 1), Addis Ababa, Woreda 3 Education office (CP 2), Berhanena Selam Parenting Enterprise (CP 3), and Addis Ababa Road and Transport Authority(CP 4). The interviews with the community partners is classified into three main themes: Co-planning for community engagement, access to university resources, and partnership for teaching, research, and technology transfer.

6.3.1.1. Co-planning and assessment of needs for community engagement

According to scholars in the area of community engagement, for a community engagement project to be effective, planning together with the community members is crucial (Bringle & Hatcher, 2000). Communities are engaged when they play a meaningful role in planning, implementing, and evaluating community engagement projects. Moreover, engaging the community in the community engagement projects is also important for sustaining the project and making it effective (Furco, 2001).

Interviewed community partners were asked if they participate during the planning stage of the university's community engagement. Almost all of the interviewees replied that they do not have such kinds of participation in the university's plan. According to the interviewees, once the university identified its priority areas for community service, it communicates them on how to conduct the service. Explaining this issue, one of the interviewees (CP 2) states:

...the university usually comes to our office with topics of community service and all we do is arranging the time and place for teachers to attend the capacity building trainings...there are also times that we hand them the areas on which we need professional support...but they usually come with their own plans...I remember one time when they gave us a kind of checklist on which they told us to fill the areas we need to work with them, but for your surprise, they didn't even collected the checklist...we tried to send them the checklist, but we could get the person who brought the checklist...it is a long time, but the checklist is still with us... the problem of the university is that they repeatedly give the same kind of capacity building trainings every year. (CP 2, 2 August/2019)

The above response from interviewee CP 2 indicates that it is the university that decides on what issues community service is given and that the community is simply a recipient of knowledge or services from the university. Repetition of the same kind of training every year is also mentioned. This might happen as a result of not consulting the community partners during the planning stage of the university community service. Another interviewee (CP 4) strengthened this idea stating the following

...no it is the university which always comes with its own plan and we help them arrange the time and place for conducting the community service trainings...sometimes it takes a TOT(Training of Trainer) approach and we take on the training once our employees are well trained...this way we help the university. (CP 4, 21 August/2019)

The rest of the interviewees, except one, also agree that they have no involvement in the planning stage of the university's community service. One of the interviewees (CP 3) however, states that his institution has an experience of planning with the university on working together.

He states that his institution has coproduced a curriculum with AAU. He states the following:

...I do not know if it can be considered as a community service or engagement, but we have recently developed a joint curriculum with the university...we wanted to develop the capacity of our employees and we communicated with AAU to develop for us a curriculum in some specialization areas. They took three employees from our institution and they co-produced the curriculum with teachers from AAU...by the way, we have paid huge money for this service...but if you ask me about their plan for the overall community service projects of the university, we haven't participated in that kind of issues. (CP 3, 14 August/2019)

It can be implied from the above interviewee that AAU has also room for partnership on different technology/knowledge transfer activities. However, in the planning process of AAU's community service/engagement projects, the role of the community seems to be very limited, if not none. The community is restricted to receiving what is given by the university scholars.

6.3.1.2. Access to the Resources of the University

When asked if they have the access to use the resources of the university, the responses of the interviewees are mixed. Two of the interviewees (CP 2, and CP 3) state that they have the access to use the resources of the university. One of them (CP 4) stated that he is not sure if he can access the resources of the university or not as he has never asked the university to use its resources. The other (CP 1) stated that the university is not so willing to let its resources be used by the community. When explaining this issue, CP 1 said:

...the university officials create good communication with us until they finish the what they planned to work with us...once they finish their community service activities, they don't even want to talk to us...we have been working so many activities with this (AAU) university, but when we ask them to use the football playing ground for our football club, they could not allow us...I do not know why they refused to give us, but whenever I go to sidist killo (main campus of the university), I see the playground serving different community members. (CP 1, 5 July/2019)

As can be seen from the above, it seems that the university has a trend of opening the door for the community to use university resources. Most of the interviewed community partners agree that the university is more or less open for the community to access its resources.

6.3.1.3. Partnership for Teaching, Research and Technology Transfer.

Another issue that the participants were asked about was if they have a partnership with the university on teaching, research, and technology transfer. Almost all of the participants of the interview state that except for the technology transfer activities through training and consultancy, they have not such a strong partnership on teaching and research. Discussing this issue, one of the participants (CP 1) state:

... our relationship is more of using the expertise in the university (technology/knowledge transfer) via capacity building trainings and workshops targeting at introducing new technologies to our employees...as to my knowledge we have no such thing as collaborative teaching or research...I remember one day when students from the technology faculty came and visited our institution and we showed them some important areas of our work... we have never been invited to the university to teach or share knowledge. (CP 1, 5 July/2019)

This idea is also shared by CP 2 who stressed that the partnership is more of one way. According to CP 2, most of the time AAU has its own plan on issues to be undertaken as community service. Regarding collaborative research and teaching, this interviewee states the following:

...in 2009, we wanted to conduct research on the quality of education in secondary schools and we wanted to do it with the university. They submitted a proposal to our office on the issue and we asked the university to participate our educational experts in the research. But they told us to participate only on the data collection process and even for this job they have taken only two experts from our office... we intended to develop the research skill of our experts so that we can do it by ourselves next time. However, the university was not willing to take at least five of our experts in the research team of 12 professionals...the problem is that they do not think that our experts are also capable of doing research with little help...our experience on the education sector is also something they highly need. (CP 2, 2 August/2019)

It seems from the above response that the university does not trust partners enough to work with them for mutual benefits. It is also easy to understand from the tone of the interviewee that there is a sense of lowliness in the relationship with the university and that the university lacks respect for their institution and creates unequal power relations between them. But according to CP 3, any collaboration must make sense of all parties if it is to be sustainable. The partnership between them and AAU seems to be one way:

The rest of the participants also believe that the partnership is no such strong which also entertains their role as an important ingredient. According to CP 3, any collaboration must make

sense of all parties if it will be sustainable and the partnership between them and AAU seems to be one way:

...we always raise this issue to the university. If they really need us as their partner, we need to sit down and negotiate on our mutual interests...sometimes students come to our institutions for apprenticeship without our knowledge just carrying a single letter from the university. I remember one day when we refused to accept them just to tell the university that it has to respect us. (CP 3, 14 August/2019)

This is not the only complaint this interviewee (CP 2) has. He adds that the university does not orient the students to get knowledge from his institution. He said that whenever they come, the students simply try to fill the checklist they bring from the university:

...I think, the aim of sending students for an apprenticeship should be clear. Students should come here to add knowledge and skill because there is practical knowledge in our institution. Most of the students come here just to fill the checklist they bring from the university. For me, when students come here, they should believe that they come to another area of learning and this attitude should be developed in the university. (CP 2, 2 August/2019)

As to this interviewee (CP 2), even the apprenticeship cannot be taken as a collaborative teaching. He also stresses that the partnership should be based on mutual understanding and respect. Like CP 1, this interviewee also believes that the university does not seem to respect the mutuality of the partnership.

Only one of the participants (CP 3) state what looks like collaborative research between the university and his institution. From the above discussions, it can safely be said that the relationship between the university and its partner is more of a one-way process than a strong partnership with mutual interest and goal.

This is also confirmed by higher officials of the university. As can be recalled one of the officials, PCS, states:

...I cannot confidently say that there is a good involvement of the community in our community service activities...we are trying to create a strong committee under our office which can strengthen the partnership of the university with the community...as you have seen, we changed the name of our office from community service to community engagement...community engagement is what we are aspiring for...if we create a good community engagement in the university, that will answer most of our questions since engagement is more of partnership. (PCS, 22 March/2019)

6.3.2 Teachers' Involvement in UTM

One of the major stakeholders of the university are teachers. In order to investigate teachers' current level of awareness on, attitude towards and involvement in UTM, a questionnaire was developed, data were collected from university teachers and analyzed via SPSS V. 25. Teachers were asked general questions on the awareness of UTM. Further indicators of UTM's dimensions were added in order to measure the attitude and involvement of teachers in UTM. For the sake of clarity on the analysis, the items in the questionnaire were classified under the core dimensions of UTM: Community service/engagement, Technology transfer, and continuing education.

Before going to the details, teachers' demographic profile is presented.

6.3.2.1. Demographic Profile of Respondents

Demographic information can include such items as the participants' age, gender, race/ethnicity, educational level, and languages spoken (Hammer, 2011). In this study, since the detail of the participants has nothing to do with the objective of the research, very few profiles of teachers is presented. These profiles are sex, academic rank, and experience. This is presented just to show that the participants are qualified and experienced enough to give genuine data for the research.

Table 8: Demographic Profile of AAU Teachers

	Sex			Academic rank				Experience			
	M	F	Total	Assis. Prof.	Asso. Prof.	Profess	Tota l	5-10 yrs	11-15 yrs	Above 16yrs	Total
No	94	7	101	72	28	1	101	12	28	61	101
%	93%	7%	100%	71%	28%	1%	100 %	12%	28%	60%	100%

As table 8 reveals, most of the participant teachers 94 (93%) are males while the rest 7(7%) are females. Regarding their qualification, the majority,72(71%), are assistant professors, while a considerable number of them, 28(28%) of them are associate professors. The rest 1(1%) is a full professor. The table also shows that majority of the participant teachers 61(60%) while the rest 28(28%) and 12(12%) have a work experience ranging from 5-10 and from 10-15 years, respectively. Given their experience and qualifications, the data from these respondents can help this research a lot. As can be seen from table 8, respondent teachers of Addis Ababa University have the qualification and experience to genuinely respond to the questions. Moreover, their academic rank, which ranges from assistant to full professor level makes them more legitimate for the agenda of UTM as teachers at this level are expected to spend most of their time in research and community service (MoE, HEP, 2009). However, it is worth noting that this research is not interested to relate the responses of the participants to their background profile.

6.3.2.2. AAU Teachers' Awareness on UTM.

A Questionnaire that uses five-point Likert scale was developed and administered to AAU teachers in order to measure their awareness on UTM. The questionnaire ranges from 5(very surely) to 1 (not at all). The awareness of teachers was examined in five ways: (a) awareness on the missions in general and UTM in particular (b) awareness on dimensions of UTM (c) awareness on the activities of UTM (d) awareness on the differences among the dimensions of UTM and (e) the awareness on the benefits of UTM. One sample t test was used to assess teachers' current level of awareness on UTM.

6.3.2.2.1. Awareness of the University's Missions

Under this sub-theme, teachers were asked about the mission of AAU in general and UTM in particular.

Table 9: AAU teachers' awareness on Missions of University

Items	Test value = 3						
	N	Mean	Standard deviation	Df	Mean difference	T obtained	Sig.(2-tailed)
Missions of the university	101	3.6604	.78841	100	.66040	5.048	.000
The third mission of the university	101	3.0297	.51876	100	.02970	.575	.566

(Significant $p < .05$).

The positive mean difference in the above table shows that a reasonable awareness level of teachers exists. The t-value for the first item, the general mission of the university, shows also that there is a significant difference between the expected and the calculated means ($t = 5.048$, $df = 100$, $p = .000$). It can be implied from this result that teachers surely know the missions of the

university. The one-sample t test value for the second item, however, shows that there is no statistically significant difference between the expected and calculated mean at α ($t = .575$, $df = 100$, $p = .566$). This entails that teachers know somewhat about how UTM is defined in their university.

6.3.2.2.2. Awareness on the Dimensions of UTM

Since the term UTM is an umbrella term for technology transfer, continuing education, and social engagement, it's better to ask the respondents about their awareness on the three different but mutually exclusive dimensions of UTM (Laredo, 2017, E3M, 2012). In this vein, the following table presents the result of this analysis.

Table 10: Awareness on how the dimensions of UTM are defined at AAU

Dimensions of UTM	Test value =3						
	N	Mean	Standard deviation	Mean difference	Df	T obtained	Sig.(2-tailed)
Community service/engagement	101	3.3762	.097828	.37624	100	3.865	.000
Technology transfer	101	3.0198	1.18305	.01980	100	.168	.867
Continuing Education	101	3.1089	1.17389	.10891	100	.935	.353

(Significant $p < .05$).

Table 10 indicates that the informants express a belief that they have a good level of awareness on how community service/engagement, technology transfer, and continuing education are defined at AAU. However, a one-sample t test for technology transfer and continuing education shows that there is no statistically significant difference between the expected and calculated means. The value shows no significant difference at ($t = .168$, $df = 100$, significant $p = .867$) and ($t = .935$, $df = 100$, significant $p = .353$) for technology transfer and continuing education

respectively. This means that teachers know somewhat how continuing education and technology transfer are defined at their university. In other words, this means that teachers are not confident enough to say ‘yes I surely know’ to the question. On the other hand, teachers reported a relatively high level of awareness on their knowledge about how community service/engagement is defined at their university. The one-sample t taste for this item shows a statistically significant difference at ($t= 3.865$, $df = 100$, significant $p=.000$). This means that teachers surely know-how community service/engagement is defined.

6.3.2.2.3. Awareness on Activities of the Dimensions UTM

Table 10 concerns understandings of how the three dimensions of UTM are defined at the university. However, there are different activities categorized under these three dimensions. The following table presents the analysis of the knowledge of teachers on these activities. It indicates that there may be a negative mean difference between the expected and calculated mean for all three dimensions of UTM.

Table.11: awareness of AAU teachers’ awareness on the specific activities of UTM

Dimensions of UTM	Test value = 3						
	N	Mean	Standard deviation	Mean difference	df	t-obtained	Sig.(2-tailed)
Activities regarded as community service/engagement	101	2.8911	.59835	-.10891	100	-1.829	.070
Activities regarded as technology transfer	101	2.9109	.61805	-.08911	100	-1.449	.150
Activities regarded as continuing education	101	2.8711	.61383	-.16891	100	-1.780	.078

(Significant $p<.05$).

The negative mean difference that is indicated in table 11 suggests that the level of awareness of teachers on the specific activities regarded as community service/engagement, technology transfer, and continuing education is possibly quite low and the values of the one-sample t-test for the three dimensions also suggests that there is no statistically significant difference between the expected and calculated mean at ($t = -1.829$, $df = 100$, significant $p = .07$), ($t = -1.449$, $df = 100$, significant $p = .15$), and ($t = -1.780$, $df = 100$, significant $p = .078$) for the activities of community service/engagement, technology transfer and continuing education respectively. This implies that teachers know somewhat about the specific activities of the three dimensions UTM

6.3.2.2.4. Awareness on the Differences among the Dimensions of UTM

One of the challenging issues officials raised during the interview session was the confusing nature of the dimension of the universities third mission. As can be remembered, officials states that there is a confusion of role, particularly between technology transfer and community service/engagement of the university. The following table, hence, presents the views of teachers on their awareness of the differences among the three dimensions of UTM.

Table. 12: Awareness of AAU teachers on the differences among the dimensions of UTM

Dimensions of UTM	Test value = 3						
	N	Mean	Mean difference	Standard deviation	df	t-obtained	Sig.(2-tailed)
community service/engagement and technology transfer	101	2.7426	.68780	-.25743	100	-3.761	.000
technology transfer and continuing education	101	2.9703	.92147	-.02970	100	-.324	.747
Community	101	2.9901	.87744	-.00990	100	-.314	.910

service/engagement and continuing education							
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(Significant $p < .05$).

Table 12 indicates that the awareness of teachers about the differences among the activities of technology transfer, community service/engagement and continuing education are quite low. However, the one-sample t-test value in table 12 shows that there is a statistically significant difference between the expected mean and calculated mean on the awareness of teachers on the differences between community service/engagement and technology transfer at ($t = -3.761$, $df = 100$, significant $p = .000$), implying that teachers know little about the differences between the activities of community service/engagement and technology transfer. In contrast, the one-sample t-test value for the differences between community service/engagement and continuing education, and Technology transfer and continuing education show that there is no statistically significant difference between the expected and calculated mean at ($t = -.324$, $df = 100$, significant $p = .747$) and ($t = -.314$, $df = 100$, significant $p = .910$) for the difference between technology transfer and continuing education and community service/engagement and continuing education respectively. This entails that teachers know somewhat about the differences between these two. Generally, it can be implied that teachers seem not to be confident to speak about the differences among the dimensions of UTM.

6.3.2.2.5. Awareness of the Benefits of UTM

Among the issues raised during the interview, the session was the benefits that engaging in UTM brings to the teachers. As to the interviewed officials, teachers cannot be forced to engage in UTM as far as some kind of load is assumed for the time they sacrifice (PVP). The legislation also gives a little point for UTM as a criterion for the tenure and promotion of academic staff. Hence,

as the officials said, teachers may not see any benefit from the activities of UTM. However, as one of the interviewees said, “when we look at the bigger picture, engaging in UTM can have a huge contribution for solving societal problems and this, I think is a professional and moral obligation”. In order to investigate what really teachers think, the following table presents the responses of teachers.

Table 13: awareness of teachers on the benefits UTM

Dimensions of UTM	Test value = 3						
	N	Mean	Standard deviation	Mean difference	df	t- obtained	Sig.(2-tailed)
Engaging in community service/engagement	101	3.0495	0.4950	.90968	100	.547	.586
Engaging in technology transfer	101	2.9703	8.7699	-.02970	100	-.340	.734
Engaging in continuing education	101	3.0198	.01980	.90532	100	.360	.826

(Significant $p < .05$).

Teachers were asked to report their awareness of the benefits of UTM. The data in table 13 depict that there is a positive mean difference in teachers’ awareness regarding the benefits of engaging in community service/engagement and continuing education. This shows that the awareness of teachers on the benefits of engaging in community service/engagement and continuing education is above that average. However, the one-sample t-test value in the same table shows that there is no statistically significant difference between the expected and calculated mean on the awareness of teachers on these two items at ($t = .547$, $df = 100$, significant $p = .732$) and ($t = .360$, $df = 100$, significant $p = .826$) for the community service and continuing

education. This means that the awareness of teachers on the benefit of engaging in community service/engagement and continuing education is somewhat. Almost similarly, even though the awareness of teachers on the benefits of engaging in technology transfer shows a negative mean, there is no statistically significant difference between the expected and calculated mean at ($t = -.340$, $df = 100$, significant $p = .734$). Put another way, teachers know somewhat about the benefits of engaging in technology transfer. In other words, teachers are not sure enough to speak about their knowledge about the benefits of engaging in technology transfer.

6.3.2.3. Attitude towards UTM

Addis Ababa University Teachers' attitudes towards UTM were assessed. Five-point Likert scales ranging from 5 (strongly agree) to (1) strongly disagree was developed. Nine (9) items were used to assess the attitude towards community service/engagement while 6 and 3 items were used to assess the attitude towards technology transfer and continuing education respectively. One sample t-test was employed to examine the current status in teachers' attitude towards UTM. The following table presents the result of the analysis.

Table 14: Attitudes of AAU teachers towards UTM

Dimensions of UTM	Test value	Mean	Standard deviation	Mean difference	t-obtained	Sig.(2-tailed)
community service/engagement	27	27.1602	3.81832	.16020	2.580	.061
technology transfer	18	18.1782	2.21086	.1782	1.280	.070
continuing education	9	9.0099	.00990	1.38921	.072	.943

($df = 100$, significant $p < .05$).

Table 14 shows that there are positive mean differences between the expected and calculated mean on the attitudes of AAU teachers towards all three dimensions of UTM. The one-sample t-test for all the three dimensions also show there is no statistically significant difference between the expected and calculated mean at ($t= 2.580$, $df = 100$, significant $p=.061$), ($t= 0.072$, $df = 100$, significant $p=.943$) and ($t= 1.280$, $df = 100$, significant $p=.070$) for the community service, technology transfer and continuing education respectively. This entails that the teachers may hold ambivalent attitudes in all the dimensions of UTM.

6.3.2.4. Involvement in UTM

In order to assess the involvement of teachers towards UTM, a five points Likert scale questionnaire was developed around 9 items for community service/engagement, 5 items for technology transfer, and 2 items for continuing education. The result of one sample t-test is presented below:

Table 15: Involvement of teachers in UTM

Dimensions of UTM	Test value	Mean	Standard deviation	Mean difference	t- obtained	Sig.(2-tailed)
Engaging in community service/engagement	27	26.5645	-1.613	-.43548	3.6817	.108
Engaging in technology transfer	15	13.2871	4.15533	-1.21721	-4.143	.000
Engaging in continuing education	6	1.2238	1.10319	-.37624	-3.427	.063

($df = 84$, significant $p<.05$).

Table 15 presents negative mean scores for all three dimensions of UTM and implies that the general level of teachers' involvement in UTM is low. In addition, the one-sample t-test for community service/engagement and continuing education shows that there is no statistically significant difference between the expected and calculated mean on the involvement in UTM at ($t= 3.6847$, $df = 100$, significant $p=.108$) and ($t= -3.427$, $df = 100$, significant $p=.063$). This implies that teachers' involvement in community service/ engagement and continuing education activities is limited to sometimes. The one-sample t-test value for technology transfer, however, shows that there is a statistically significant difference between the expected and calculated mean at ($t= -4.143$, $df = 100$, significant $p=.000$). This implies that teachers involved in technology transfer activities rarely or not at all.

6.4. Summary of Core Results

This chapter presented the institutionalization of UTM at Addis Ababa University. In doing so, the institutional orientation towards, institutional support for, approaches, and coordination of and stakeholders' involvement in UTM were investigated through document reviews and semi-structured interviews. Accordingly, the following results were found:

- i). Institutional orientation: Even though the university included the agenda of UTM in its mission statements, there is a lack of clarity on the concept (UTM). Discrepancies were found not only across the reviewed documents but also within the same document trying to define UTM. Moreover, the interviewed officials were also found to have different conceptions of UTM. The boundaries between the dimensions of UTM are blurred.
- ii). Institutional orientation: AAU has produced important documents on UTM. It has produced policies for the technology transfer and social engagement dimensions of UTM.

However, no policy or guideline was found for the continuing education aspect of UTM. Even though the university's policies and guidelines support UTM, the senate legislation of the university failed to treat UTM as equal as the two traditional missions of the university. The legislation assigns very insignificant points for UTM in the promotion and tenure criteria of academic staff.

The three dimensions of the UTM - technology transfer, continuing education, and socials engagement, are there at Addis Ababa University. Regarding the coordination, while technology transfer and community service/engagement are organized under the vice president for research and technology transfer, continuing education is managed under the academic vice president. This implies that continuing education is considered as a teaching mission at Addis Ababa University. Moreover, formal boundaries and horizontal line of communication have not been created among these dimensions of UTM which make the distinction among the dimensions blurred. Furthermore, the offices running UTM have not extended their management span to the different academic units in the university, which could have helped the university attach the activities of UTM in teachers and students' daily activities.

iii). leadership and support: Even if the leadership of AAU is committed to produce policies and coordinating entities for UTM, it was found out that there is a lack of commitment to support UTM financially. The leadership was found to be reluctant to create a strong partnership with the community partners and involve the faculty and students.

iv). Stakeholder involvement: AAU performs many community service activities like free legal advising services, policy consultancy services, capacity building trainings, contact researches, and many others. However, it has not created a strong partnership with the community partners. The involvement of community partners in community service projects, in teaching and conducting research is weak. The relationship between the university and the community is more of uni-directional from the university to the community.

Teacher awareness, attitude, and involvement: Addis Ababa University teachers were found to have high level of awareness of the general missions of their university. These teachers were also found to have some level of awareness of UTM. Regarding how the three dimensions of UTM are defined in their university, teachers were found to have a high level of awareness on community service dimensions, while they reported having some level of awareness on continuing education and technology transfer dimensions. Regarding the specific activities categorized under each dimension and the benefits of engaging in each activity, AAU teachers reported that they are somehow aware. These teachers also reported that they are ambivalent about their attitudes on all activities of UTM. Finally, the involvement of teachers in different UTM activities of the university was assessed. Accordingly, teachers were found to involve in community service and continuing educations dimensions sometimes while they hardly involve in technology transfer activities of their university.

CHAPTER SEVEN: INSTITUTIONALIZATION OF UTM AT JIMMA UNIVERSITY

Jimma University is a public higher educational institution established in December 1999 by the amalgamation of Jimma College of Agriculture (founded in 1952), and Jimma Institute of Health Sciences (established in 1983). In 2001 it expanded its scope and included Jimma Hospital. The university has three campuses located in Jimma Town, 355 km southwest of Addis Ababa. Nowadays, Jimma University is the pioneer and leading Community-Based Higher Learning

Institution with its philosophical identity, “We are in the community” (JU, Guideline for Community service, 2018)

From running a few diploma programs in the fields of health, medicine, and agriculture, the university evolved to offer multidisciplinary study programs in seven colleges. Currently, the university offers 57 undergraduate, 119 MA/MSc, and 17 PhD programs. Student enrolment in the year 2015 was 42,917 and the numbers of the academic and administrative staff were 1452 and 4566, respectively. JU has contributed a great deal in adopting, adapting, generating, and transferring new knowledge and sharing its research outputs (JU, Guideline for Technology Transfer, 2018).

7.1. Jimma University’s Institutional Orientation Vis a Vis UTM

Like the discussions made on AAU’S institutional orientation, Jimma University’s institutional orientation is discussed based on two main components: conceptualization of UTM and integration of UTM into the mission statement of the University. Below are the discussions on each of these sub-topics. In order to explore the institutional orientation of Jimma University towards UTM, website reviews, document reviews, and interviews are done. The presentation and analysis start with the interview then go to the review of the website and documents.

7.1.1. Conceptualization

Regarding how UTM is conceptualized at Jimma University, interviews with six higher-level officials of the university (Participants from the office of Vice President for Research and Community Service, Office of Research Directorate, Office of Community Service and Engagement Directorate, Office of Community Based Education, and Office of Continuing and Distance Education and Office of University-Industry Linkage and Technology Transfer) have

been conducted. The interviewees are coded PVP, PRD, PCSE, PCBE, PCDE, and PTT respectively.

All the participants of this interview have nearly the same answers regarding the first question of the interview (what is the mission of this university?). They all state that the university has a mission to train professionals (teaching), to conduct problem-solving research (research), and to render community service (service). Even if there is a slight difference in the usage of the term, all the participants stress the importance of community service in their words. When asked to define what they mentioned as the third mission (community service), most of them are not confident enough to clearly put how community service is defined at their university. However, they prefer to define the concept of UTM from their own knowledge. One of the interviewees, (PCSE) tried to define in a somewhat general way as follows:

...Our university has a mission to produce competent graduates, to conduct problem-solving research and give community service...it is really challenging to define the University's Third Mission as a concept...it is a bit broader and ambiguous...I generally define the universities third mission as a mission which encompasses the activities of the university directed towards the community for the benefit of both the university and community... in our university, the community service and engagement office is established for this purpose...when I say the 'activities of the university directed towards the community, it should be noted that it does not include those activities of regular teaching and research. I know that these activities are also directed towards the community in some aspects...but, do not get confused that this is the definition I give, not the university's definition. I'm not sure how our university defines it. (PCSE, 23 July/2019, Jimma University)

Community service and engagement is considered as UTM at Jimma University. The participant also states that the activities of UTM are different from the teaching and research activities of the university. I asked him how UTM can be different from the teaching and

research activities of the university as these two are also aimed at benefiting both the community and the university. He stated the following:

... yes both teaching and research are done for the benefit of the community and the university, however, do not forget that these two can be done inside the wall of the university... I mean basic research for the sake of research can be done in the libraries and/or laboratories...teaching can be done only in the classrooms separated from the large community. This was the case in the universities for many years. In this UTM concept, I think, universities are expected to go out of their walls and work with the external community. (PCSE, 23 July/2019, Jimma University)

Another participant, PRD, explained the UTM concept differently to this by attaching it to the Community Based Education Program (CBE) of the university:

...I define it as a mission that relates the university with the community... it is known as Community Based Education (CBE). In this program, we allow our graduate and undergraduate students to solve different social problems based on the theoretical knowledge they have gained from the university...they go out to the community, try to find out pressing societal problems and try to give a solution for this problem in collaboration with the community itself...I think this is a good example of community engagement. (PRD, 16 July/2019, Jimma University)

Another participant, PCDE, has a different view on the concept of UTM. As to this participant, UTM is a capacity-building and technology transfer job done by the university. For him, when universities try to build the capacity of the community through different kinds of trainings or knowledge transfer activities, that can be considered as UTM. Asked if he is familiar with the way UTM is defined in the university, he states that he is not quite sure about how it is defined at the university.

Another participant, PVP, has a different conceptualization. He states:

...for me, every activity of a university is community service...it is clear that any activity is done by the university just to solve societal problems...for me, even community service can be regarded as technology transfer and technology transfer as community service. If we consider technology in its broader sense, thus, technology transfer is a main aspect of UTM...but, I do not think it is considered as a UTM in our university... the problem here is that we are specialist in our way of treating UTM, which is Community Based Education (CBE)...when we are trying to form other forms of community-related job, we are losing many things. (PVP, 15 July/2019, Jimma University)

There is then no consensus regarding the concept of UTM among the interviewees beyond their recognition that community service and engagement is their universities third mission. They could not clearly define this mission and there seems to be confusion about the concepts of technology transfer, consultancy, and community service and engagement. The last interviewee raised a sensitive issue regarding this when he stated that the university is using a model that is not part of Jimma University's tradition of CBE. According to him, the confusion may arise due to this fact.

In order to triangulate the results of the interview, documents and websites were also reviewed to explore how UTM has been conceptualized at Jimma University. Following is a statement is taken from the website of the university:

Community service (CS). That is, community services and engagement (CSE) is one of the three major pillars of universities. Consequently, there is a strong desire to see universities play a more active role in development. In particular, the academic community has been calling for a "Triple Helix Model" that underlines the need for universities to move to a third "revolution" in this 21st century (societal development), after a first revolution (teaching, and a second revolution (research) in the 19th and 20th centuries respectively. There has also been a growing recognition attached to universities' role in community development within the national policy landscape of many countries. In Ethiopia, the Higher Education Proclamation No. 650/2009 clearly outlines the political agenda and objectives that are particularly

relevant to university community service. (<https://www.ju.edu.et/?q=director-community-services-and-engagement>, retrieved on May, 20/2018)

The above statement is taken from the Website of Jimma University, directorate for community service and engagement. As can be seen from the statement, the university has recognized ‘community service and engagement’ as its UTM. This website further explains this issue of community service and engagement.

Traditionally, the implementation of community services at JU has been taking place within the context of its unique and innovative educational philosophy, the CBE (Community Based Education). However, a significant portion of the university’s developmental activities also happens outside the CBE. The office of Community Services and Engagement (CSE) of JU is the institutional organ that is responsible for the latter. The office aims at enhancing JU’s commitment to serving the local community through institutionalization and better coordination of the practice of community services of the university. (<https://www.ju.edu.et/?q=director-community-services-and-engagement>, retrieved on May, 20/2018)

This statement identifies that community service and engagement in the university has been organized as a Community Based Education (CBE) program within the office of community service and engagement of Jimma University, which is also responsible for those activities outside of the activities done by CBE. However, what these other activities are is not specified, making it, therefore, a little difficult to identify exactly from the web pages what is considered as community service and engagement at Jimma University.

Very recently, the university produced a community service guideline to guide the activities of community service and engagement. However, this guideline contradicts the way community service and engagement is defined at the university’s website as technology transfer activities, health service of the universities, and free legal service are regarded as community service.

Community service in Jimma University possesses special features due to its cherished educational philosophy of Community Based Education (CBE); besides the

comprehensive health services it offers through its specialized referral hospital; free legal service, and promotion of transfer of selected technologies to the community. (JU, Guideline for Community Service, 2018: 5)

Technology transfer is named as part of the community service. However, technology transfer is also an independent office from the office of community service and the activities of technology transfer are remunerated. As the guideline for technology transfer of Jimma University states, “the purpose of facilitating technology transfer in Jimma University is twofold: solving the problem of the community or industry and gaining additional revenue for the university”, making a clear identification of what is considered as UTM at the university quite difficult.

The university also uses different terms to describe the University Third Mission which also exacerbates the confusion. It uses community service, community engagement, outreach activities and community-based education to denote UTM and also the definitions given at different places are a little different. On the university’s website, the Director for community service and engagement defines three important terms: Community service, community engagement, and community-based participatory research. It defines these terms since it considered them as basic components of community service and engagement of the university:

Community service means any unremunerated service that is performed for the benefit of the public, its institutions, or for non-profit organizations by academic staff and students of higher education institutions. Essentially it entails services being taken out from the usual and mainstream institutional settings and provided in local community settings. Community Service does not necessarily mean volunteering, since it is not always performed voluntarily. Universities may be involved in community service for a variety of reasons, (as a citizenship requirement to help communities that need urgent health services in times of epidemics, for protecting the environment such as afforestation, terracing, etc.) Community services are often mandated by universities

to meet the requirements, such as in the case of service-learning or to meet the requirements of graduation or to meet the requirement of academic promotion by staff members. They draw on partnerships and networks with other service providers to deliver and promote research findings in local communities, make better the community way of life, aware the community on how to best utilize the resources available. Community service can be employed to raise the awareness of the local community on the services the university can provide to society. It may include training community or community leaders, intervention on selected social services/problems, demonstration of best practices, and popularization of best practices. (<https://www.ju.edu.et/?q=director-community-services-and-engagement>, retrieved on May, 20/2018).

Almost the same definition is given for the outreach service of the university. In the guideline for community service project development, the outreach service of the university is defined as follows:

Outreach services... draw on partnerships and networks with other service providers to deliver and promote research findings in local communities, make better the community way of life, aware the community on how to best utilize the resources available. (JU, Guideline for Community Service, 2018: 2)

It is unclear here whether outreach service is being used interchangeably with community service? In the definition given for community service of the university, partnership with other service providers, networking, service-learning, and academics and students voluntary activities are mentioned as some of the main activities. All these activities are almost repeated in the definition given for community engagement. The definition given for community engagement in Jimma university states:

Community engagement is defined as the collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership

and reciprocity. This generally entails applying institutional resources (e.g., knowledge and expertise of students, staff, political position, buildings, land, crop varieties, animal breeds, etc.) to address and solve challenges facing communities through collaboration with these communities. The methods for Community engagement include community service, service-learning, community-based participatory research, training and technical assistance, capacity-building, and economic development. Thus, community service can be viewed as a way to engage the community and deliver services in local settings and environments. (<https://www.ju.edu.et/?q=director-community-services-and-engagement>, retrieved on May, 20/2018)

The methods described for community engagement include community service, service-learning, community-based participatory research, training, and technical assistance, capacity-building, and economic development. This can imply that all community service, outreach, and community-based education (service-learning) can be included under the umbrella term community engagement and that there is no need to treat community service, outreach, and community-based education as separate activities. But this can create confusion concerning the difference among community service and engagement, university-industry linkage, and technology transfer activities of the university.

In addition, confusion exists with regard to the difference among community service and university-industry linkage and technology transfer activities of the university. The university-industry-linkage and technology transfer office is an independent office that deals with internship (engagement of students in practical training in different industries in Ethiopia) and externship activities in the university & Technology Transfer which focuses on the process of knowledge transferring the new findings, technologies & researches in the University for commercial or public use (<https://www.ju.edu.et>. Retrieved on January 2018). However, there seems to be role confusion among the offices of community service and engagement and

university-industry linkage and technology transfer. In the guideline for community service project development, it states that individuals or groups of individuals who want to apply for community service projects should be aware of the Guidelines and Procedures for Community Based Education (March, 2013), and additionally the procedure on the selection of technology and how to transfer a selected technology that has been described in the Guidelines and Procedures for Publication and Extension (February, 2013) (JU, Guideline for community service, 2018: 2).

From the above statement, it can be implied that individuals or groups can come up with a project on technology transfer and a project emanates from community-based education. Here, the question would be what is the role of the technology transfer office if technology transfer activities are done by the community service and engagement office? Or is that not possible to assign a budget for the Community Based Education office to extend its selected activities to all services directed to the community?

7.1.2. Integration of UTM in the Mission Statement

Jimma University has integrated the agenda of UTM in its mission statement. Following is the mission of the university:

To train high caliber national and international professionals, undertaking quality and problem-solving research, serving and engaging local, national, and global communities through its cherished and innovative Community Based Education (CBE). (JU, Strategic Plan, 2016:4)

The mission statement of the university states serving and engaging with the community are priorities and it also talks about Community Based Education (CBE). Community-Based Education is a participatory learning process that includes formal (school-based) and non-formal

(out-of-school) education to facilitate widespread participation in re-orienting values towards community development and providing skills and knowledge for the entire population (Asefa, 2000). That means, on one hand, that the program aims at promoting a synthesis of students' skills, knowledge, capabilities, and attitudes directed towards priority needs by going beyond cognitive capacities to encompass social and emotional aspects of learning for specific populations, and, on the other hand, that the university provides a learning environment for education that is relevant to community needs (JU, Strategic Plan, 2016). This is one strategy used by Jimma University to implement the community engagement mission. It shows that the university has clearly integrated the agenda of UTM in its mission statement.

All six of the interviewed university officials also responded that the university has clearly addressed UTM in its mission statement and one of them said that the integration of UTM at Jimma University starts from its philosophy. He said (PVP) that this is reflected in “our motto, which says we are in the community and I think this shows how committed Jimma University is towards this issue”. As stated by the participant, the motto of Jimma University says we are in the community” (JU, Strategic Plan, 2016). Morpew and Hartley (2006) suggest that mission statements can be a way of establishing institutional uniqueness and for that matter could be used as a tool in institutional decision-making. The agenda of UTM has been integrated into the mission statement of Jimma University.

7.2. Institutional Support

Three sub-themes will be discussed under this main theme. These are JU's Policies and Strategic Documents on UTM, Approaches, and Coordination towards UTM, and leadership and support towards UTM.

7.2.1. JU's Policies and Strategic Documents on UTM

Jimma University possesses special features regarding UTM due to its educational philosophy of Community Based Education (CBE) and it considers that it can effectively address UTM activities through CBE (JU, 2018). Thus, it has produced a policy on the CBE of the university. However, since it started to think that all types of community engagement activities are not tackled through CBE, it has established the office for community service and engagement. The aim of this office is, as mentioned so far, to perform community engagement activities that are not covered through CBE. This office has also produced a guideline for the university's community service activities. Furthermore, university-industry linkage and technology transfer is another glue that is believed to fasten the university with the community. Consequently, it has established the office for university-industry linkage and technology transfer). The office of university-industry linkage and technology transfer has also prepared a guideline on the technology transfer activities of the university. (JU, 2018). (<https://www.ju.edu.et/?q=director-community-services-and-engagement,https://www.ju.edu.et>)

These documents and the strategic plan of the university as well as the Senate legislation are reviewed in this sub-section.

7.2.1.1. Jimma University Guideline for Community Service

Jimma University considers community service as a way of implementing its community engagement activities (UTM). For this purpose, it produced a guideline to direct its activities and a brief outline of the guidelines pertaining to the overall promotion, coordination, and administration of activities. Four basic issues are raised: (i) How to initiate community service projects (project concepts), (ii) how to request funding for proposed community service by

different colleges, units or individuals, (iii) how the proposed community services should be evaluated/reviewed for funding, (iv) the support to be provided for the selected and approved community service projects, (v) monitoring and evaluation of the accomplishment of approved community service projects (JU, Guideline for Community Service, 2018).

The guideline also tries to define what community service means in the university and how it is related to the community-based education and technology transfer policies. Moreover, this guideline puts incentives and benefits for teachers who participate in community service projects. It states, “any staff who takes part in a community service project (team member) is eligible to receiving certification of participation (letter of participation), which can be used for promotion”. The incentive for engaging in community service is also stated in terms of workload. It states:

The time input of participation in such projects shall also entitle the participating staff to workload benefit equivalent to participation in DTTP(Development team Training Program) or CBTP(Community Based Training Program). Thus, guidelines to workload consideration here shall be subjected to guidelines applicable to DTTP/CBTP (JU, Guideline for Community service, 2018: 4)

The above discussions show that the community service (one dimension of UTM) activities of JU are guided by a guideline prepared for this purpose. Moreover, the incentive and benefits of engaging in community service for teachers are clearly indicated which may help increase the involvement of teachers in community service (UTM).

7.2.1.2. Policy on Research, Community Based Education and Graduate Studies

This policy is designed to stimulate the synergy between research undertaking, -post-graduate studies, and community-based education. Multidisciplinary and needs-based research and

postgraduate programs have been aligned with research thematic areas of the University (p. 1) accordingly within a policy that defines CBE as a “win-win learning process” where students use the community as a learning environment and render services to the community through problem identification, prioritization, implementation, and evaluation of -interventions in relation to the benefits reached to community and students in the learning process (JU, Policy on Research, Community Based Education and Graduate Studies, 2010:3).

This policy states that the purpose of designing this policy is to create linkage and synergy among research, postgraduate studies, and CBE:

- (i) Multi-disciplinary research and development
- (ii) periodical revitalization of need-based research
- (iii) creating enabling environment for research and dissemination
- (iv) coordination and management of research
- (v) resources mobilization, diversity, and sharing
- (vi) management information system
- (vii) institutionalizing of research for sustainability
- (viii) emerging and cross-cutting issues
- (ix) create a platform for dissemination
- (x) Enhancing Community-Based Education
- (xi) Fostering grant and consultancy
- (xii) Promoting research-based graduate studies
- (xiii) Implementing the policy (JU, Policy on Research, Community Based Education and Graduate Studies, 2010:4).

Generally, CBE, as one method for implementing UTM has been supported by a policy at Jimma University. As mentioned above, CBE is, therefore, an active learning process where students use the community as a learning environment at the same time rendering services to the community through problem identification, prioritization, implementation, and evaluation of the interventions in relation to the benefits reached to community and students in the learning

process (JU, Policy on Research, Community Based Education and Graduate Studies, 2010, JU, Guidelines, and Procedures for Community Based Education, 2013).

7.2.1.3. Jimma University Guideline for Technology Transfer

Jimma University produced a guideline for technology transfer activities in June 2018 in order to outline and stipulate the procedures, strategies, and functions of technology transfer there (JU, Guideline for Technology Transfer, 2018). This document also states that the purpose of facilitating technology transfer in the university is twofold: solving the problem of the community or industry and gaining additional revenue for the university. This concept is in line with the concept of UTM discussed so far. However, the document is also described as a way of incentivizing staff member who participates in technology transfer activities as it states that TT enables promotion, workload compensation, financial reward and administrative support (JU, Guideline for Technology Transfer, 2018) and it also gives an overview about ownership of intellectual property rights (IPR), patentable and non-patentable products, and revenue sharing.

Generally, it can be inferred that the technology transfer activity of the university is led by a guideline produced by the office of vice president for research and community service.

7.2.1.4. Strategic pan of JU (2016 to 2020)

As stipulated in the strategic plan, this is the third strategic plan for the university and it is expected to cover the years 2016 to 2020. This plan is prepared in alignment with the education policy of the country and incorporates quality education, problem-solving research and community services. This is meant to fit in the priorities established in the second Growth and Transformation Plan (GTP-II) which emphasizes economic growth and industrialization. The

strategic plan is aimed at enabling JU to respond to societal calls and emerge as one of the top innovative universities (JU, Strategic Plan, 2016)

The strategic plan has five strategic themes, of which two strategic themes (strategic theme 2 and 3) are largely devoted to UTM. Strategic theme 2 states about excellence in research and technology transfer while strategic theme 3 deals with excellence in community service and engagement. The strategies forwarded for achieving excellence in research and technology transfer include (i) Employ technology transfer endeavors for reward and promotion (ii) Establish technology commercialization advisory board of JU (iii) enforce communication mechanisms for disseminating research outputs (iv) Establish technology villages in the community (JU, Strategic Plan, 2016).

The strategies for achieving excellence in community service and engagement include: (i) Review and update CBE strategy towards adopting community engagement and partnerships; (ii) Provide need-based services to the community; (iii) Establish stakeholders' forum (social media network, public debates, strategic planning issues, monitoring, and evaluation); (iv) Conduct philanthropic campaigns; (v) Promote innovation and enhance knowledge exchange facilitates (galleries, museums, library, sports facilities, recreation centers); and (vi) Increase college-high school attachments and partnerships (JU, Strategic Plan, 2016). These activities are mainly related to UTM and they have received attention in the strategic plan of JU. All the aforementioned activities are activities that are mainly related to UTM. As can be seen above UTM has received enormous attention on the strategic plan of JU.

7.2.1.5. Senate Legislation

The Senate legislation of JU was prepared in 2007. This legislation is organized under 9 standing committees of the senate. These are:

- (i) The Academic staff appointments and promotions Committee
- (ii) The academic standards and curriculum review committee
- (iii) The Admission and Placement Committee
- (iv) The continuing and distance education standing Committee
- (v) Senate Library and Documentation Committee (SLDC)
- (vi) The Research and Publications Committee
- (vii) The Staff Development and Scholarship Committee (SDSC)
- (viii) The ACADEMIC Planning, Finance, and Development Committee
- (ix) Short-term Training and Consultancy Service. (JU, Senate Legislation, 2007:8)

As evidenced above, UTM is represented through two activities: The continuing and distance education standing Committee and the Short-term Training and Consultancy Service, even though not legally considered as UTM at Jimma University. Community service and engagement (which is mainly considered as UTM) and technology transfer activities are not mentioned under the 9 main standing committees. The philosophy, mission, and vision of the university have not also been included in the Senate legislation of Jimma university. However, the legislation mentioned effective teaching, publications, and community service as main criteria for academic staff promotion. However, the points given for community service is very low as compared to effective teaching and publications. Let's see the criteria for promotion to the assistant, associate, and full professorship levels (JU, Senate Legislation, 2007). The following tables summarize the criteria for the promotion to the professorship.

For promotion to the ranks up to Assistant Professor:

(Applicant shall earn a minimum of 65%)

Table 16: promotion criteria for the ranks up to Assistant Professor

No	Criteria	Score
1	Effective teaching	40
2	Publication	35
2	Institutional affair	15
4	Community service	10

Source: JU, (2007): Senate Legislation of Jimma University

For promotions to the rank of associate professor and professor:

(Applicant shall earn a minimum of 75%)

Table 17: promotions criteria for the rank of associate professor and professor:

No	Criteria	Score
1	Effective teaching	40
2	Publication	35
2	Institutional affair	15
4	Community service	10

Source: JU (2007): Senate Legislation of Jimma University

While it can be taken as a positive thing to include community service (UTM) in the legislation, the point assigned to this mission is very minimal which has little or no effect on the academic staffs' promotion.

7.2.2. Approaches and Coordination of JU towards UTM

It is obvious that both the approach and organizational structure of UTM depend highly on how UTM is conceptualized in the university. As discussed so far, there is confusion regarding the

conceptualization of UTM at Jimma University. Sometimes the university states that community service is its third mission while technology transfer and consultancy activities are regarded as UTM on other documents. There is also confusion of the concept of UTM among the university officials working on the area. However, based on community-related activities of the university and the dimensions of UTM, this section tries to assess Jimma university's approaches and organizational structures towards UTM.

Regarding technology transfer, Jimma University has an independent office for university-industry linkage and technology transfer aspects of UTM. University-industry linkage and technology transfer was established in July 2017 at the directorate level to manage the university's technology transfer and technology-based industry outreach program (JU, Guideline for Technology Transfer, 2018). It is only two years since this office has been established in this university. The main activities of this office are two: internship and externship. The internship is related to students learning time in different industries while externship is related to activities in the university and Technology Transfer which focuses on the process of knowledge transferring of the new findings, technologies & researches in the University for commercial or public use (<https://www.ju.edu.et>). However, technology transfer activities are not new for the university. These activities were solely performed by institute of technology for a long period of time. Explaining this, PTT, states:

Technology transfer activities are not new for JU as it has been practiced for more than 15 years under the institute of technology. Even now, this activity is independent of the institute of technology. Even if this institution is under Jimma University, it has its own directorate and runs independently...since the university believed that every college and institute in the university should participate in technology transfer activities, this office has been opened. (PTT, 12 July/2019, Jimma University)

He went on explaining the issues related to technology transfer in Jimma University,

Since it is only two years old office, many things are lacking here. It is very recently that we've developed a guideline for technology transfer activities and intellectual property right for the university. I think most teachers do not even know where the office of technology transfers placed in the university...it is not a well-established office with organized activities... the problem is even worst for the university-industry linkage which does not have any guideline and sometimes confusing with Community Based Education. (PTT, 12 July/2019, Jimma University)

There is an office established for the university-industry- linkage and technology transfer. However, it seems that technology transfer activities are still new and that the university-industry linkage activities are more problematic than the technology transfer activities. There is confusion of role with the community-based education program of the university.

The university-industry linkage and technology transfer office of JU is organized under the vice president for research and community service (JU, Guideline for Technology Transfer, 2018). It is led by a Directorate level official. The directorate for university-industry linkage and technology transfer of JU is the responsible organ for coordinating all university-industry linkage and technology transfer activities of the university except for the institute of technology. Institute of technology has an independent office for these activities which is directly answerable to the vice president for research and community service (JU, Guideline for Technology Transfer, 2018). Regarding this, among the interviewed officials, PPT states:

As the office is relatively new, most of the activities are not well matured. We do not have offices at the college or institute levels. The university is now trying to attach the activities of university-industry linkage and technology transfer to the offices of colleges' associate deans for research. (PTT, 12 July/2019, Jimma University)

Asked if the office of university-industry linkage and technology transfer has a horizontal relationship with the office of community service and engagement or continuing education of the university, the official states (PTT):

...no, we do not have a formal horizontal relationship with the offices you mentioned. But, sometimes we work together on some issues like the issue of budget, community service proposal evaluation, research proposal evaluations and the like...as we are under one university, the overall target is achieving the goal of the university...regarding continuing education, I do not think we have common specific responsibilities to share. (PTT, 12 July/2019, Jimma University)

The organizational structure of university-industry linkage and technology transfer is not extended to the college level but if university-industry linkage and technology transfer activities are directly related to the faculty and students, there should have been an office at the college/institutes levels. Moreover, the office does not have a formally established horizontal relationship with the offices of community service and engagement and continuing education.

Another dimension of UTM, Social engagement or community service and engagement (as known in JU) is another UTM activity in Jimma University, where it is defined as meaning any unremunerated service that is performed for the benefit of the public, its institutions, or for non-profit organizations by academic staff and students of higher education institutions. Essentially, it entails services being taken out from the usual and mainstream institutional settings and provided in local community settings (JU, Guideline for Technology Transfer, 2018).

Community Services may include training community or community leaders, intervention on selected social services/problems, demonstration of best practices, and popularization of best practices (JU, Guideline for Community Service, 2018). On this issue, one of the interviewed officials, PCSE, states:

...the university used to embed community service under the community-based education... However, it identified that there are activities that cannot be covered by this community-based education. For instance, different trainings, and some social services are done by the university were not run institutionally and it was very informal and unsystematic. Due to this, the university wanted to institutionalize the activities and that is why this office is established...but, there are still problems of coordination. (PCSE, 23 July/2019, Jimma University)

An office has been established for community service and engagement but this does not guarantee a level of organizational fluency, within which the work of the organization is done by teams of collaborative people with a clearly a shared purpose and interdependent work:

...what we often do is call for community service projects and receive proposals. We start the project when we have a fund from the government or other funding organization and we forget it once the project is started. Much of the community service projects are not reported and documented... If, for instance, we could not get enough budget or funds for projects, there will not be community service. I think this should be changed. We need to move from project to programs. These programs should be managed by the office of community service and engagement properly. Now, I cannot say that we have an organized and well-coordinated community service and engagement in our university...for instance college of health science has its own organization and structure which is totally different from this office. (PCSE, 23 July/2019, Jimma University)

Establishing an office for coordinating community service and engagement activities (UTM) of the university seems like a good step for helping to run the activities of UTM in an institutionalized way. However, there still seems to be some confusion over the conceptualization of UTM and this may have led to confusion about technology transfer and community service. Exactly why this has happened is difficult to fully ascertain but the knowledge necessary to help employees to become truly fluent drivers of the JU UTM seems to be missing.

Like the office of university-industry linkage and technology transfer, the office of community service and engagement is organized under the vice president for research and community service. The office has responsibility for coordinating all activities of community service and engagement except for the institute of health. This institute has its own independent office which is directly answerable to the vice president for research and community service. Similar to the office of university-industry linkage and technology transfer, the community service and engagement office has no offices at college or institute levels. The interviewed official, PCSE, from this office states:

Attention has not been given to the community service and engagement activities of the university. It is very recently that the university formally started this job. Due to this, this office is not strong enough to deal with the issue...we do not have the structure at the college level which could have helped us a lot...of course, institute of health has its own center but that is not under our office...(PCSE, 23 July/2019, Jimma University)

The office of community service and engagement of JU is not strong enough yet to do its activities efficiently. Community service has long been attached to the institute of Health while technology transfer was considered as a job of the institute of technology. When asked if the office has a horizontal relationship with the offices of university-industry linkage and technology transfer or continuing education, the above informant says:

We do not have a formal horizontal relationship among ourselves, but since our office and the office of university-industry linkage and technology transfer are under the same vice president, we usually discuss issues. (PCSE, 23 July/2019, Jimma University)

What is noteworthy here is that the office of continuing and distance education are under the auspice of the academic vice president while the office of community service and engagement,

and university-industry linkage and technology transfer are under the vice president for research and community service. This means that continuing and distance education is regarded as the first mission (teaching) of the university at Jimma University. Unlike the community service and engagement and university-industry linkage and technology transfer offices, continuing and distance education has coordinating offices at college levels.

Community-Based Education (CBE) is a unique approach of Jimma University to deal with UTM. It has been nearly 30 years since CBE was introduced in JUs education system. This did happen in the former Jimma Institute of Health before it was amalgamated with Jimma College of Agriculture and form Jimma University in 1999 (JU, Policy for Research, Community Based Education and Graduate Studies, 2010) as a way of enhancing the quality of its education and training via ensuring the relevance of the university's training programs. The university's CBE implementation guideline clearly positioned CBE as a means of achieving educational relevance to community needs and consequently of implementing a community-oriented education program. It consists of learning activities that utilize the community extensively as a learning environment. It is, therefore, a win-win learning process where students use the community as a learning environment at the same time rendering services to the community through problem identification, prioritization, implementation, and evaluation of the interventions in relation to the benefits reached to the community and students in the learning process (JU, Guidelines, and Procedures for Community Based Education, 2013). In order to achieve these objectives, the university has devised three major categories of courses and included them in the curricula as implementation strategies. These are:

(i).Community-Based Training Program (CBTP), which is implemented in all undergraduate programs of the university in $n-1$ formula where n represents the duration of the program in years.

(ii). Team Training Program (TTP), whose implementation is limited to undergraduate programs of the college of public health and medical sciences

(iii). Developmental Team Training Program (DTTP), which is implemented at post-graduate level including terminal degree programs and Students Research Project (SRP), which is undertaken at the final year of each training program (JU, Guidelines and Procedures for Community Based Education 2013; Asefa, 2000).

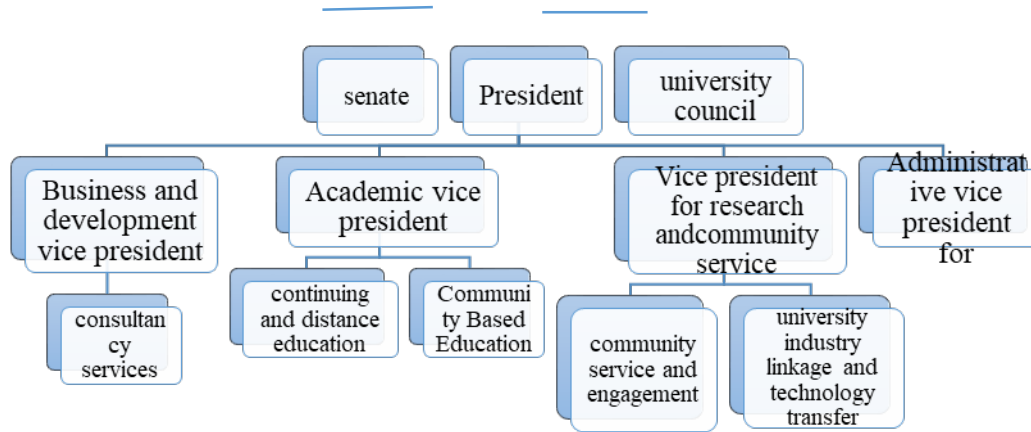
There is a strong culture of the program in the university with an office under the academic vice president. However, interview data suggests that the office has no formal line of communication with either the office of community service and engagement or university-industry linkage and technology transfer. Regarding the horizontal relationship with other offices:

...our office is under the academic vice president while the offices you mention /office of the community service and engagement and office of university-industry linkage and technology transfer/ are under the vice president for research and community service. I do not think we have to have a formal horizontal relationship with these offices. For your information, community-based education is not considered as the third mission in our university. It is community service that is considered as the third mission...it is better if you contact the community service director. (PCBE, 10 July/2019)

The office of community-based education is organized under the academic vice president and community-based education thus seems to be regarded as part of the first mission of the university (academic teaching) rather than the third mission. Yet on the guideline for community

service of Jimma University, Community based education is regarded as an aspect of community engagement (UTM) (JU, Guideline for Community service, 2018). This is a little confusing.

Figure 6: Partial organizational structure of Jimma University



Source: Based on information gathered from Jimma University

7.2.3. Leadership and Support towards UTM

Leadership is an “influence relationship among leaders and followers who intend real changes and outcomes that reflect their shared purposes” (Daft, 2011:5). Nowadays, most organizations have come to agree that effective leadership is one of the most important contributors to overall organizational performance and change (McKee & Massimilian, 2006). Organizational success lies within the leadership styles of leaders because they are responsible for the efficacy and performance of their subordinates (Saeed, Mahmood, & Ahmad, 2013). Like other organizations, the performance of a higher education institution is related to the commitment of its leadership (Rehman et al., 2012).

The commitment of the leadership of JU towards UTM was also an issue that was explored in the interviews with the five higher-level officials, almost all of whom agreed that although the issue of UTM seems to be high on the agenda of the university it was not given due emphasis and the commitment of the leadership was very low. One of the participants (PTT) stated:

...attention seems to be high... But, in practice neither the government nor the university is committed...you can see my office, which is not well equipped to do even the routine office activities... I am the only person in this office...I do not have any assistant...I do n't not have a secretary. It has been more than two years since this office has been established, but it has not been equipped yet...I always ask the university about the issue, but no response...I sometimes think that the issue of this third mission is more political than academic because the issue seems to be the priority of the government and the universities at a rhetoric level. However, there is no commitment to change it into practice...there is also another trend in the university, considering technology transfer activities as the job of technology faculty. (PTT, 12 July/2019, Jimma University)

The university's commitment does not extend beyond rhetoric according to this informant, who expresses that the high-level university officials are not strong enough to develop talk into other social practices. Another interviewee (PCSE) shares the views of PTT. He states that the commitment of the university's leadership is too weak to make the issue of UTM effective at the university. He also raised the issue of low budget assignment:

...when you look at the budget assignment, not only is it very low when compared to teaching and research but also confusing. A huge amount of money is assigned for the community service program of the university, but more than 95% of the budget is taken by the institute of health. (PTT, 12 July/2019, Jimma University)

Another interview (PCBE) has a relatively different view on the leadership commitment of the university towards UTM. As to this interviewee, the issue is also related to the confusion on the conceptualization of UTM itself. He states that neither the ministry of education nor the

university managers are clear about what should be considered as UTM. He believes confusion on the concept has made the leadership of the university not to be committed towards the mission. He gave an example of the confusion regarding UTM as follows:

...for instance, two years ago, around 100,000,000 Birr was assigned for community service and engagement of the university. But, the public health service has taken almost all the budget and other colleges and institutions were denied the service...of course, if the leadership is committed, it would be easy to clearly categorize the activities of UTM and assign a budget accordingly...I know that public health service is one part of the university's community service, but I do not think it should be managed in that way ... sometimes, some activities are suddenly categorized under community service and the budget of community service is misused. (PCBE, 10 July/2019, Jimma University)

Here, leaders are described as committed but that confusion arises. Almost in the same vein, PCSE, states:

...for me, opening offices for the third mission activities and trying to plan for the activities is more of a response to the external pressure on the universities...you have to know that unless you create such things, you will not have a proper plan for asking budget. Thus, in order to get a budget or win other funds, you have to respond in a way that pleases the government or others...you know that we were very effective in our community-based education modality of dealing with the issue of third mission. For me, it was possible to upgrade that approach using the budget. (PCSE, 23 July/2019, Jimma University)

Once again it seems, although the leadership has initiated UTM activities, commitment to change rhetoric into reality seems to be lagging behind.

7.3. Stakeholders' Involvement in UTM

The core stakeholders chosen for the current study are: community partners and university teachers. The coming pages will discuss these two stakeholders' involvement in Jimma University's UTM activities.

7.3.1. Community Involvement in UTM

According to Ofuoku, (2011), unless a community is allowed to be involved in the development of interventions designed to improve their livelihood, they will continue to miss the benefit of any intervention. Community involvement is a social process whereby specific groups with shared needs, often but, not always living in defined a geographical area, actively peruse the identification of needs and make decisions and establish mechanisms to meet these needs (Ofuoku, 2011).

To explore the views of stakeholders, semi-structured interviews were conducted with five community partners of Jimma University. The interviewees were from the governmental organization, community elders and leaders, schools, and non-governmental organizations. They are represented by PGO (Participant from government organization), PCE (Participant from community elders), PCL (Participant from community leaders), PS (Participant from government organization), and PNGO (Participant from the non-governmental organization). As discussed under the methodology section, these participants were chosen through snowball sampling.

The responses of the interviewees are categorized under the following sub-themes which emerged from the data. Co-planning for community projects, access to the resources of the university, partnership for teaching, research and technology transfer.

7.3.1.1. Co-planning for Community Projects

According to Ofuoku, (2011) the effectiveness of community involvement depends on planning it from the outset as an integral part of a project. Participants of the interview were asked if they have any involvement in the process of planning community-related activities of the university. All of the participants stated that their involvement is limited to some practices of the university's community service activities. One of the participants (PGO) states:

...I have never been involved in any planning process of the university...whenever they have some kind of program, they send us a letter and ask for cooperation. We usually ask them to, at least, give us training on CBE (Community Based Education) so that we can help their students do the activities, but they could not even do that, let alone inviting us for planning community projects. (PGO, 24 July/2019, Jimma)

Another interviewee, PCL, also states that he has never been invited to the university for the purpose of co-planning community projects. He states that he helps the university in convincing the community whenever the university has some kind of project which needs the cooperation of the community. He states:

...sometimes the community has a doubt on the benefit of some community projects designed by the university, thus, I help the university in convincing the community members about the importance of the project...no, I have never been involved in any kind of planning of community development projects...whenever the university has some kind of ceremony, they invite me as a guest and I open programs. (PCL, 11 July/2019, Jimma)

Another participant from a non-governmental organization, PNGO, states that the cooperation between them and the university more relies on the interest of the university. She states:

...four years ago there was a community development project which we were doing with the university. I used to meet the university official frequently, mainly due to this project. After that project had come to end, our office submitted a proposal for the university on a new project which they rejected. But, they did it by themselves...we

know that they used our idea and started the project without our knowledge...after we complained about it, they have now started cooperation with us again...whenever they come to our office, they always come with their own ideas and they want us to help them implement. Because we do not want to lose our relationship, we help them without understanding the project clearly. (PNGO, 20 July/2019, Jimma)

Here, it can be understood that the cooperation between the university and the organization seems to be one way- from the university to the organization (non-governmental organization). There seems also a lack of trust between the organization and JU which is against the strong principle of partnership. The above participant clearly stated that her organization does not have any say on the university's community-related projects, let alone planning together.

The participant from the school (PS) is also in line with what the rest of the participants stated. He said that the participation of his school is limited to arranging time and space for the project done by the university. He states:

...most of the time we are informed through letters that people from the university will come to the school to give some kind of training or knowledge transfer activities. Even the letters do not give detail of what the university intends to do in our school...we usually submit our needs on which we need the university help us, but they do what they believe is important for us. (PS, 19 July/2019, Jimma)

It is clear from the above response that the relationship between the university and the school seems to be highly dominated by the interest of the university. As to the above participant, (PS), the schools' needs are not taken into consideration by the university. This is also picked up by the participant from the community elders, PCL, who stressed that his role does not go beyond being involved in university ceremonial activities but that he does sometimes go to the university to listen to the annual or semi-annual reports. It seems like the involvement of the community

partners is limited to the implementation process and that they have no role during the planning stage of community-related projects.

7.3.1.2. Access to the resources of the university

Almost all of the participants state that they have access to the resources of the university. They stated that whenever they want to use some kind of resources from the university, the university is willing to let them. The participant from School, PS, states that the university also helps them equip their library and laboratories by giving them materials and facilities:

...we usually ask them to use the laboratory and library of the university and they truly help us access these resources. We sometimes also use their computer lab to give training for our students...they also give us some books which we put it in our library.
(PS, 19 July/2019, Jimma)

As to this participant, not only accessing the resources of the university, the university also help them equip their library and laboratories by giving them materials and facilities. Another participant from the government office, PGO, states:

...we get both human and material resources from the university. For instance, we got these computers from the university. They sometimes send us some faculty members and give us training on some issues...I also remember when we asked them for the university's playground and they allowed us to use it.
(PGO, 24 July/2019, Jimma)

The rest of the participants also state that the university has no problem in making the resources of the university open for the community. The participant from a non-governmental organization, PNGO, states that her organization has benefited from the resources of the university a lot. She said that Jimma University is very close to the community in this regard and really is in the

community and well known for helping different schools and community organizations in giving materials and resources.

7.3.1.3. Partnership for Teaching, Research and Technology Transfer

Participants were asked if they have a partnership with the university on teaching, research, and knowledge/technology transfer activities. Their responses are more or less the same. They said that even though they have a good relationship with the university, it cannot be taken as a partnership. The participant from the government office, PGO, states:

...yes we work together, but we do not have such type of relationship where we also involve in planning, teaching, research or community service...our main job is assisting whenever they need...we usually accept and work with both graduate and postgraduate students during their CBTP programs. Our main duty during this time is helping students with what they need and informing the community to cooperate with the students...personally, I have never been involved in any kinds of teaching, or research or others...It is the students who even tell us what they do in CBTP or DTTP...I strongly agree with the importance of CBE, but it should be managed properly...the university has done so many things through. (PGO, 24 July/2019, Jimma)

The participant from the non-governmental organization, PNGO, also stresses that the communication from the university to the community is unidirectional- from the university to the community. She raised an example, stating:

...as I told you, there was a time when our office submitted a proposal to the university on a new project, but they rejected our proposal and did it by themselves...we know that they used our idea and started the project without our knowledge...after we complained about it, they have now started cooperation with us again...may be they think that we do not have the capacity to do with them or that might be the issue of money...We have never been invited to the teaching or research or even for curriculum evaluation. (PNGO, 20 July/2019, Jimma)

It can be implied from the response of the participant, PNGO, that the university has not created the kind of partnership that benefits both parties (the university and the partner). This participant has also raised a very typical example that exposes this. She states:

...the university had started the construction of Biogas (a kind of energy found from the mixture of gases generated from biodegradable resources in an anaerobic fermentation by methanogenic bacteria) on a large area found in Jimma town. When the university launched this project, we got the opportunity to participate in the conference. We told them that the area is not suitable for the project since it is at the center of the people's residence area. They ignored us and started the project. Soon after the project has been started, the project became a problem that was taken to a lawcourt by the community around the project area due to the smell that came out of the project. After a lot of money was wasted, since it was found out that the project is dangerous for the health of the community, the government stopped the project...for me, had they consulted the community member in advance or had they included one or two community members in the project, the project could not have started or would not have failed. (PNGO, 20 July/2019, Jimma)

The above example seems to be something the university should try to learn from. As she said, if the university had genuinely involved the local community during the pre-project research, the mentioned problem might have not occurred.

The participant from the community elders has also raised an issue that strengthens the idea raised by PNGO. He raised the issues related to the university's Community Based Education (CBE). He said that CBE started to become a program that puts high stress on the students. As he said in this program the students are expected to assess the pressing societal problem and try to solve that problem. After they assess the problem of the community, since they do not have the budget for the intervention, they usually beg NGOs, merchants, and community members to fund money for the intervention they take. He states:

....this CBE issue has started offending the community...it seems like the community is fed up with the students seeking financial support for their CBE projects...since the university has no financial support for the students, nowadays students have been observed to use their own money for their projects. Since they are students, they ask their family to send them money for their projects...as to me, going to this extent is not necessary. (PCL, 11 July/2019, Jimma)

This issue was also raised seriously by the participant from the community leaders, PCL. He said that “the university is abusing the student when it sends them out for CBE with no financial support” and added that the aim of CBE should help the students understand the problem of the community so that they can contribute to solutions when they graduate. He said that “What the students are doing is a job of government units or charity organizations”. He further states that, “CBE should also be an opportunity for the students to get a teacher from the community who teaches them what the community looks like, what practical life looks like and so forth. Even though the idea of having CBE is good, it is not being managed properly”. PCL also stated that CBE should be taken as a program of co-teaching students by the university and the community. “The philosophy is good what is being done by the university is, however, putting students under unnecessary pressure” (PCL).

The participant from the school, PS, on his part states that the university has no bilateral communications on the issue of teaching and research. He said:

....I was working in TVET (Technical and Vocational Training College). I remember When I was there, students from Jimma University continuously used to visit our college to get some practical experiences...whenever they come, they get so many new experiences from the college...the university knows this, but the university has never invited teaches from the college to give some kind training to the students... I have never seen any collaborative research conducted by Jimma University and teachers from TVET or other schools. (PS, 19 July/2019, Jimma)

To sum up, from the discussions with the participants (community partners), some core points can be raised. First, the participants believe that the communication between the university and the community seems to be unidirectional where the interest of the university is highly entertained. Second, accessing the resources of the university seems not to be challenging for the community partner as the university always try to make the resource of the university, like a library, laboratory, playgrounds and other important ones open to the public. Third, it seems like the university has no strong trust in the community partners to cooperate on teaching, research, and technology transfer. Fourth and as related to the last point, the university's Community Based Education Program, though it has so many strengths, the implementation seems to become problematic from time to time.

In order to triangulate what the community partners have raised and to get deep knowledge on the status of CBE, the interview with the aforementioned six higher officials of the university on community involvement is presented hereunder.

All the university officials agree that the road to create a strong partnership with the local community is yet to be built. However, they disagree with the point that the community partners raised regarding lack of trust in the partners for cooperation. One of the interviewee, PVP, states:

...we do not think that we have created a strong partnership with the local communities, but we are trying to transform our community service to be more of community engagement where mutuality is a strong principle...we have a real trust on the community that we can work together on the area of teaching, research and technology transfer...so far we are not such confident to say that we have involved the community in our large scale research projects, but we usually involve the community in our innovative CBE programs. And this program has a teaching, research and community service on its own. (PVP, 15 July/2019, Jimma University)

Here, the interviewee expresses a feeling that the university is engaging the community in its CBE programs. However, these views are challenged by another participant, PCBE. According to PCBE, the strategies of CBE should be revised. He stated:

...we are continuously receiving complaints both from the students and the community regarding our CBE programs. We do not want to cease the program as it is very important for assuring the quality and relevance of our programs. We rather try to finance the program so that the worries of the students and the community will be reduced. Not only financing but also clarifying the expectation from the students and the community...we have also a plan for strengthening our partnership with the local community through involving them in our every step. (PCBE, 10 July/2019, Jimma University)

The participant expresses here that the partnership has not been strong and that the challenges on CBE have been sensed by the university. Moreover, the participant seems to be convinced that there is a missing link between the university and the community. He suggested that involving the community in every step of the university partnership is of paramount importance. PCSE spoke similarly. He stated:

Jimma University has long been doing CBE. This program had enough budget at the very beginning since it got a sponsor from abroad. When the fund stopped, we did not want to stop the program, rather we decided to have a different strategy and continue the principle of the program with a limited budget. Yes, we were right not to stop it because it became the emblem of the university. But now we need to have a different strategy if we want it to continue. However ...because our focus was on the CBE, we missed other community service activities. It is only two years since we opened a formal central office for the university's community service activities. We open the office as an office of community service and engagement. I remember when it is decided to open the office. We said we need to strive for community engagement, but let's start with community service. Thus, even though the university is very committed to the community service, we cannot deny that partnership with the communities is not matured enough. (PCSE, 23 July/2019, Jimma University)

The other participants also state that Jimma University has been doing enormous activities regarding the community. However, the partnership with the community is something that needs further effort from the university as even though Jimma University has been doing so many activities, like community service, technology transfer, consultancies, and community-based education, which benefit the community at large, creating strong partnership seems to be a job left for the university to work on. Effective community involvement is vital to ensure a project is a success. The partnership also ensures that the project reflects local needs has local support, and does not have any adverse unintended consequences (Ofuoku, 2011 and Sonowabo, 2009).

7.3.2. Teachers’ Involvement in UTM

Under this section, data gathered from Jimma university teachers using five points Likert scale questionnaire are presented and analyzed. Before going into the main section of this part, respondents’ demographic information is presented. The next part deals with the awareness of teachers on UTM and its specific activities. This is followed by the analysis of the attitude of teachers towards UTM. Finally, the extent of involvement of teachers in UTM is discussed. For the awareness part, teachers were asked general questions while indicators of the core dimensions of UTM were added in the attitude and involvement parts.

7.3.2.1. Demographic profile

Table 18: Demographic Profile of JU Respondents

Sex	Academic rank	Work experience at current university
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	M	F	Total	Assis. Pro.	Asso. Prof.	Profes	Total	5-10 years	11- 15 years	Above 16year s	Total
No.	78	7	85	72	13	0	85	10	55	20	85
%	92%	8%	100%	85%	15%	0	100%	12%	64%	24%	100%

Table 18 above shows that out of the total number of participants, most of them, 78 (92%), are males while a few participants, 7(8%) are females. It is also shown in the above table that the vast majority 72 (85%), of the participants are assistant professors while only 13(5%) of them are associate professors. There is no full professor participant from Jimma University. When it comes to their work experience, the majority of the participants, 55(64%), have work experience ranging from 10-15 years. The rest 10 (12%) and 20 (24%) have work experience ranging from 5-10 and above 15 years, respectively. Even though the above profile data may have implications for research, as this study is not interested to relate participants' profiles to their responses, the data are presented to slightly show the background of the participants and their relevance to the collected data.

7.3.2.2. Jimma University Teachers' Awareness on UTM

Data are gathered through a five points Likert scale questionnaire (ranging from 5= very sure to 1= not at all) on the awareness of JU teachers regarding UTM are presented and analyzed under this section. This awareness part is categorized under five sub-scales. The first part deals with the awareness of teachers regarding the mission of their university and UTM in general. This is followed by the awareness of teachers on how the three core dimensions of UTM is defined at their university. Third, teachers' awareness of the specific activities of UTM are presented.

Fourth, the awareness of teachers regarding the differences among the three core dimensions of UTM is assessed. Finally, the awareness of teacher on the benefits of UTM are discussed.

7.3.2.2.1. Awareness of the University's Missions

Table .19: JU teachers' awareness on Missions of their University

Items	Test value = 3						
	N	Calculated mean	Standard deviation	Df	Mean difference	T obtained	Sig.(2-tailed)
Missions of the university	85	3.2353	.23529	84	1.868	1.16135	.045
The third mission of the university	85	2.4824	.81082	84	-.51765	-5.886	.000

($p < .05$).

The data presented in table 19 indicate that there is a positive mean difference for the awareness of teachers on the missions of their university. However, the value of the one-sample t-test for this item shows there is a significant difference between the expected and calculated mean at ($t = 0.05$, $df = 84$, significant $p = .045$). This means that teachers are very sure about their knowledge of the missions of their university. These teachers were also asked about their awareness of what is considered as UTM. The result in table 19 shows that there is a negative mean difference which means that teachers' awareness is below the average. The one-sample t-test value for this item also shows there is a significant difference between the expected and calculated mean ($t = 0.05$, $df = 84$, significant $p < .05$). This entails that teachers know little about what is considered as UTM.

7.3.2.2.2. Awareness of the Dimensions of UTM

Jimma University teachers were asked about their awareness of how the three core dimensions UTM (community service/engagement, technology transfer, and continuing education) are defined at their university. The following table presents the result of this analysis

Table 20: Awareness of how the dimensions of UTM are defined at JU

Items	N	Test value=3					
		Mean	Standard deviation	df	Mean difference	T obtained	Sig.(2-tailed)
Community service/engagement	85	3.9412	.07297	84	.94118	8.0871	.000
Technology transfer and Innovation	85	2.6471	.55002	84	-.35294	-5.916	.000
Continuing Education	85	3.3059	1.21522	84	.30588	2.3210	.023

p<.05).

The above data in table 20 show that there is a positive mean difference for the awareness of teachers regarding community service/engagement, and continuing education, which shows that teachers' level of awareness is above the average point. The mean difference for technology transfer, however, shows the awareness of teachers towards this dimension is below the average. The one-sample t-test values for all three dimensions of UTM show there are statistically significant differences between the expected and the calculated means at (t= 8.0871, df = 84, significant p=.000), (t= -5.916, df = 84, significant p=.000) and (t= 2.321, df = 84, significant p=.023) for community service, technology transfer and continuing education respectively. This implies that the awareness of teachers on community service and continuing education is high

while the awareness of teachers on technology transfer is far below the average. In general, it can be concluded that teachers are confident enough to surely speak about how JU defines community service and continuing education. In contrast, teachers know little or not at all regarding how JU defines technology transfer.

7.3.2.2.3. Awareness of the Activities of the dimensions of UTM

The three dimensions of UTM have different activities under them. Teachers were asked if they know the different activities categorized under these three dimensions of UTM. Like the previous discussions, one-sample t-test was calculated to see how close or far teachers are from the average point. The following table presents the results of this analysis.

Table 21: AAU teachers’ awareness of the specific activities of UTM

Items	Test value=3						
	N	Mean	Standard deviation	df	Mean difference	T obtained	Sig.(2-tailed)
Activities regarded as community service/engagement	85	3.2706	1.02804	84	.27059	2.427	.017
Activities regarded as technology transfer and Innovation	85	2.0353	1.51537	84	-.96471	-5.869	.062
Activities regarded as continuing education	85	2.2644	.79912	84	-.73563	-8.586	.071

(p<.05).

According to table 21, while negative mean differences are observed in the activities of technology transfer and continuing education, a positive mean was found for the activities of community service. This entails that the awareness level of teachers regarding the activities of

technology transfer and continuing education are below the average. However, the awareness of teachers on community service was found to be above the average. The one-sample t-test for community service shows that there is a statistically significant difference between the expected and calculated means at ($t= 2.427$, $df = 84$, significant $p=.017$). This implies that teachers are very sure about the specific activities related to community service. The one-sample t-test for technology transfer and continuing education show that there are no statistically significant differences between the expected and calculated means. The table presents significant level at ($= -5.869$, $df = 84$, significant $p=.062$) and ($= -8.586$, $df = 84$, significant $p=.071$) for continuing education and technology transfer respectively. This shows that teachers know somewhat about the activities related to technology transfer and continuing education. Put it another way, while teachers are confident enough to speak about the activities of community service/engagement, they seem not to be sure about what activities are considered as technology transfer and continuing education.

7.3.2.2.4. Awareness of the Differences among the Dimensions of UTM

One of the things found during the qualitative part of this study was that there are confusions regarding the activities of community service, technology transfer and sometimes continuing education. In order to assess if these confusions pertain to teachers, three items were developed and administered. The following table presents the result of this analysis:

Table 22: Awareness on the differences among the dimensions of UTM

Items	Test value=3						
	N	Mean	Standard deviation	df	Mean difference	t-obtained	Sig.(2-tailed)
community service/engagement and technology transfer	85	2.8588	-.14118	84	.80405	-1.619	.042
technology transfer and continuing education	85	3.2000	1.21302	84	.20000	1.520	.132
Community service/engagement and continuing education	85	3.3765	1.26281	84	.62353	4.552	.074

($p < .05$).

The data in table 22 reveal that there is a negative mean score for the awareness of teachers regarding the differences between community service and technology transfer. This simply shows that teachers' awareness of the differences between community service and technology transfer is below the average. The one-sample t-test for this item shows that there is a statistically significant difference between the expected and calculated means at ($t = -1.619$, $df = 84$, significant $p = .042$). It can be implied from this result that teachers know little about the

differences between community service and technology transfer activities. The table shows positive mean differences for both the differences on technology transfer and continuing education and the difference between community service and continuing education. The one-sample t-test also shows the same result for both items. It shows there is no significant difference between the expected and calculated means for both items at ($t = 1.520$, $df = 84$, significant $p = .132$) and ($t = -4.552$, $df = 84$, significant $p = .074$). This implies that teachers know somewhat about the difference between technology transfer and continuing education and community service and continuing education.

7.3.2.2.5. Awareness of the Benefits of UTM

On the qualitative part of this study, one of the things that the participants of the interviews raised was the issue of teachers' lack of awareness of the benefits of UTM. Hence, this part tried to assess teachers' level of awareness of the benefits of UTM.

Table 23: awareness of teachers on the benefits UTM

Items	Test value=3						
	N	Mean	Standard deviation	Mean difference	df	t-obtained	Sig.(2-tailed)
Engaging in community service/engagement	85	3.0471	.77006	.04706	84	.5630	.575
Engaging in technology transfer	85	2.1059	-9.027	-.89412	84	-9.027	.000
Engaging in continuing education	85	3.0588	1.043	.05882	84	.51991	.300

($p < .05$)

Table 23 above indicates a positive mean difference for both community service and continuing education. This shows that teachers' level of awareness on the benefits of engaging in community service and continuing education is above the average. The one-sample t test values for both items also show that there are no statistically significant differences between expected and calculate means at ($t= 0.563$, $df = 84$, significant $p=.575$) and ($t= 0.51991$, $df = 84$, significant $p=.300$). This reveals that teachers know somewhat about the benefits of engaging in community service and continuing education.

However, the mean for technology transfer is negative, which means that the awareness of teachers on the benefits of engaging in technology transfer is below average. The one-sample t-test for this item shows that there is a statistically significant difference between the expected and calculated mean at ($t= -9.027$, $df = 84$, significant $p=.000$). It can be inferred from this result that teachers know little about the benefits of engaging in technology transfer activities.

7.3.2.3. Attitudes towards UTM

Jimma University Teachers' attitudes towards UTM were assessed. Nine (9) items were developed to assess the attitude towards community service/engagement while 6 and 3 items were developed to assess the attitude towards technology transfer and continuing education respectively. One sample t-test was employed to examine the current status in teachers' attitude towards UTM. The following table presents the result of the analysis.

Table 24: attitudes of JU teachers towards UTM

Items	Test value	Calculated mean	Mean difference	Standard deviation	t-obtained	Sig.(2-tailed)

community service/engagement	27	27.5294	.52941	4.20201	1.162	.249
technology transfer	18	19.2471	-1.2471	-2.75294	-10.262	.042
continuing education	9	9.8581	.85806	1.40195	2.510	.073

(df = 84, significant $p < .05$).

Table 24 shows there is positive mean difference for community service and continuing education. This shows that the attitude of teachers is above the neutral point. But, the value of the one-sample t-test for these two dimensions of UTM show there is no significant difference between the expected and calculated mean at ($t = 1.162$, $df = 84$, significant $p = .249$) and ($t = 2.510$, $df = 84$, significant $p = .073$). This means that teachers are ambivalent in their attitude towards these two dimensions of UTM. For the technology transfer dimensions of UTM, the mean difference is negative and this shows that the attitude level of teachers is below the average point. The one-sample t-test for this sub-scale shows that there is a statistically significant difference between the expected and calculated mean at ($t = -10.262$, $df = 84$, significant $p = .042$). This implies that teachers' attitude regarding technology transfer activities of JU is negative.

7.3.2.4. Involvement in UTM

As mentioned earlier, teachers were asked about their involvement in their UTM activities. In order to assess the involvement of teachers towards UTM, 9 items for community service/engagement, 5 items technology transfer & innovation, and 2 items for continuing education were developed and data were collected accordingly. The following table shows this result.

Table 25: Involvement of teachers in UTM

Items	Test value	Calculated mean	Mean difference	Standard deviation	t-obtained	Sig.(2-tailed)
Service/engagement	27	26.5294	-.52941	4.20201	1.162	.249
Technology transfer	15	15.2471	-2.75294	-10.262	2.473	.000
continuing education	6	5.7647	-.23529	.56583	-7.093	.067

(= 0.05, df = 84, significant $p < .05$).

The data indicated in table 25 show that there are negative mean differences for all three dimensions of UTM. This generally shows that the involvement of teachers in UTM is below the average point. The one-sample t-test for the community service and continuing education dimensions shows there are no significant differences between the expected and calculated means at ($t = 1.162$, $df = 84$, significant $p = .249$) and ($t = -7.093$, $df = 84$, significant $p = .067$) respectively. This means that teachers involve sometimes in the community service and continuing education activities of the university. The t value in table 22 also shows that there is significant differences between the expected and calculated means at ($t = 2.473$, $df = 84$, significant $p = .000$) for the technology transfer dimension of UTM. This means that the involvement of teachers in technology transfer is rare. In other words, teachers rarely or not at all involved in technology transfer activities.

7.4. Summary of Core Results

The above chapter presented the investigation of the institutionalization of UTM at Jimma University. In order to investigate the institutionalization of UTM at Jimma university, the

university's institutional orientation towards, institutional support for, and stakeholders' involvement in UTM were the focuses of the investigation. Jimma University's UTM was reviewed. Moreover, semi-structured interviews were conducted with the officials of Jimma University. Following are the core findings of the investigation:

- i) Institutional orientation: Even though Jimma University has integrated UTM in its mission statements, the conceptualization of the mission is inconsistent across the reviewed documents. The university has not yet decided what term to use for its third mission. Community service, community engagement, community service and engagement, community-based education, and community outreach are the common nomenclature used at the university. However, the differences among these nomenclatures have not been made clear. There are discrepancies in the usage of the nomenclature across the documents. The interviewed officials also revealed different conceptualizations of the mission.
- ii) Institutional support: Jimma University has recently (April/ 2018) developed guidelines for community service project development and technology transfer activities of the university. It has not, however, produced any guideline for the continuing education aspect of UTM. The university has a long history of treating UTM through its community-based education for which it has a well-established policy document. Even if the university showed commitment in including incentives for teachers who work on community service projects, the senate legislation of the university assigns very little point for UTM activities in its staff promotion and tenure criteria.

In addition to the three core dimensions of UTM (technology transfer, social engagement, and continuing education), Jimma University has an approach known as Community Based Education (CBE) for entertaining the agenda of UTM. It has a long history of using CBE as a tool for dealing with the third mission. In this approach, teaching, research, and service are integrated and implemented at the same time. Recently, however, it seems that the university has shifted its attention to independently deal with the dimensions of UTM as it has opened independent offices for community service and technology transfer activities. Regarding the coordination, while technology transfer and community service are organized under the same vice president (vice president for research and technology transfer), continuing education and CBE are organized under the academic vice president. This implies that both continuing education and CBE are considered as the teaching mission of the university in Jimma University. Moreover, there is no formal line of communication among the different activities of UTM even between those which are organized under the same vice president. Lastly, it was also found out that both technology transfer and community service offices have not extended their office to the different academic units. Community-based education and continuing education have focal persons in some of the academic units of the university.

- iii) Leadership and support: Even though Jimma University seemed committed to the UTM through opening offices and developing guidelines, there is a lot left for the university on the implementation of the mission. For instance, the offices opened for this purpose are not well equipped to perform basic activities. Due to the blurredness

of the concept of UTM, the assignment of budget and other resources are problematic.

- iv) Stakeholder Involvement: Jimma University's long history of working with the community through CBE has started to fed up due to financial and administrative problems. Due to this, the partnership between the university and the community partners has been deteriorated from time to time. This study has found out that there is no strong partnership between the university and the community partners in planning community service projects, in co-teaching or research. The relationship between the university and the community is more of one way from the university to the community partners.

While Jimma University teachers were found to have a high level of awareness on the general mission of their university, they were found to have little awareness of UTM. Regarding the three dimensions of UTM, teachers were found to have a high awareness level on community service and continuing education while their awareness level was little on the technology transfer aspect of UTM. The awareness of these teachers was also assessed regarding the specific activities categorized under each dimension of UTM. Consequently, while they were found to have high awareness of the activities of community service, their awareness on continuing education and technology transfer was found to be somewhat. Teachers' awareness of the differences between the three dimensions of UTM is another area on which teachers were assessed. They reported that they know little about the difference between technology transfer and community service. On the other hand, these teachers reported that they know somewhat about the differences between continuing

education and the other two dimensions of UTM. Jimma University teachers also reported that their awareness of the benefits of engaging in community service is somewhat good while they know little about the benefits of engaging in technology transfer activities. The attitudes of teachers towards and their involvement in UTM were also assessed. Accordingly, teachers were found to have negative attitudes and rare involvement in technology transfer activities. However, these teachers have reported a high level of awareness, hesitant attitude towards and little involvement in community service and continuing education dimensions of UTM. It seems clear that the technology transfer dimension of UTM is not trendy in the university.

CHAPTER EIGHT: COMPARISON OF CASES: KEY POINTS

Comparative case analysis involves the comparison of the units of analysis in case studies to produce a synthesized outcome (Khan and VanWynsberghe 2008). According to Bartlett & Vavrus, (2017), it will involve the analysis and synthesis of the similarities, differences, and patterns across two or more cases that share a common focus or goal, in this case, the institutionalization of UTM. They will usually utilize both qualitative and quantitative methods, as in the present research, and are particularly useful for understanding how the context may have influenced the success of different initiatives, approaches or interventions. This has been the aim of the present investigation, which has also looked for clues as to how interventions in UTM initiatives may be formed in order to achieve their aims. The comparative analysis of the commonalities and differences in Addis Ababa and Jimma universities regarding the institutionalization of UTM are considered in the coming pages. Although this chapter only compares findings from earlier result chapters, it also makes an effort to synthesize and create meaningful conclusions from the two cases. However, this chapter does not discuss the results of the study, which would be presented in chapter nine.

8.1. Institutional Orientation

The single case analysis identified the institutional orientation as being composed of two sub-themes: Conceptualization of UTM and integration of UTM in the universities mission statement. The following paragraphs deal with these two sub-themes comparatively.

Regarding the conceptualization of UTM, both universities have branded community service and engagement as their UTM. However, when it comes to conceptualizing this mission, neither of them have clearly defined the difference between community service and community

engagement and it is unclear whether other dimensions such as technology transfer (consultancies, university-industry linkage, contract research...) and continuing education activities (short term trainings, further education...) belong to community service and engagement or not. Thus, there are inconsistencies and uncertainties in defining and interpreting UTM not only on the documents level but also among the university officials.

Addis Ababa University has recently started using the term ‘community engagement’ instead of community service, but the move from community service to community engagement has not been made clear. Similarly, Jimma University has started using the nomenclature ‘community service and engagement’, but the difference between community service and community service and engagement is not clearly articulated. Furthermore, Jimma University has been using Community Based Education (CBE) program to treat the agenda of UTM. However, it has recently altered its institutional reorientation to treat community service and engagement and technology transfer activities independently.

However, both universities have clearly integrated UTM in their mission statements. They devoted a large part of their mission statement to explain how the university interacts with the community in order to transfer knowledge and bring overall development.

Table 26: The cross case analysis of institutional orientation on UTM

Themes	Addis Ababa University	Jimma University
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Conceptualization	<ul style="list-style-type: none"> • Community service/engagement as UTM • contradictions, inconsistencies, and confusions regarding the conceptualization of UTM 	<ul style="list-style-type: none"> • Community service/outreach/engagement, CBE as UTM, but no clear distinction between these nomenclatures • contradictions, inconsistencies, and confusions regarding the conceptualization of UTM
Mission integration	<ul style="list-style-type: none"> • clearly integrated into the mission statement 	<ul style="list-style-type: none"> • Clearly integrated into the mission statement

8.2. Institutional Support

Institutional support is composed of three sub-themes: policies and strategic documents, approaches, and coordination, and leadership commitment. The following section discusses the similarities and differences observed in Addis Ababa and Jimma universities regarding this theme.

Regarding the policies and strategic documents on UTM, both universities have produced policies and have integrated the issue of UTM in their strategic plans and senate legislation. However, while the universities have produced guidelines for technology transfer and social engagement aspects, they do not have a formal guideline for the continuing education aspect their third mission and the informal guidelines have different definitions of the different components of UTM, sometimes even within the same document. Moreover, the senate legislations of both universities discuss very little about UTM. For instance, the legislations assign a very minimal point for UTM in its staff promotion and tenure sections, and although the universities have included their third mission issues in their strategic plans they have done so in a confusing way.

When it comes to the way the two universities approach and coordinate UTM, similarities between the two universities outnumber differences. All the components of UTM-technology transfer, continuing education, and social engagement are introduced into the universities' system and both universities also have an organizational structure (offices for technology transfer, community engagement, continuing education) in place for coordinating the activities of UTM as well as an independent office for the college/institute of health sciences and most of the community service activities of the universities are being done by this college/institute of health.

Concerning differences, Addis Ababa University has a relatively more matured office for technology transfer than Jimma University. However, Jimma University has a strong and well-established Community Based Education where the three missions of the university can come together and are supposed to create a combined effect. Jimma has been using this integrated approach (CBE) as its main social/community engagement aspect of the university. Addis Ababa University on the other hand has a long history of using university service (service-learning).

Regarding technology transfer, Jimma University has an independent office for technology transfer activities at the institute of technology. Thus, it seems that the issue of community service is not a new agenda for either Addis Ababa or Jimma. The former has a long history of university service (service learning) while the latter is well known for its CBE. However, neither university has transformed this community service into a strong partnership with the community to the level of reciprocity and mutual benefit with the community partners. Even though these universities have established offices for the different dimensions of UTM, they have not created formal horizontal lines of communications between them and this has sometimes been reported to have resulted in role confusion among the officials assigned for different dimensions.

There are clear similarities in the leadership commitment towards UTM at the two universities, with commitments to establish offices, to produce policies, to create structures and strategic documents, and to assign a budget for UTM. However, reduced commitment is seen on clarifying conceptual discrepancies and blurredness of the activities of UTM. Besides, the universities are not committed enough to decentralize the activities of UTM to the academic units. On top of these, a clear horizontal line of communications across the dimensions of UTM has not been created. Thus, the lack of clear horizontal lines of communication coupled with the absence of decentralized management restricts the possible ties between the activities of UTM and the faculty. The UTM seems to happen haphazardly in the universities and to a certain extent the results of the study suggest that this may be due to a lack of leadership commitment. The following table summarizes this discussion.

Table 27: Cross case analysis on Institutional support

Themes	Universities	
	Addis Ababa university	Jimma University

Policies and strategic documents	<ul style="list-style-type: none"> • Policies are formulated, strategic plans integrated UTM, and legislation hardly considers UTM. 	<ul style="list-style-type: none"> • Policies are formulated, strategic plan Integrated UTM, legislation hardly considers UTM
Approaches and Coordination	<ul style="list-style-type: none"> • All the three dimensions(technology transfer, continuing education, and social engagement) are there, • Centralized for social engagement • Slightly decentralized for technology transfer and continuing education • A relatively matured offices for technology transfer 	<ul style="list-style-type: none"> • All the three dimensions(technology transfer, continuing education, and social engagement) are there, • A strong Community-Based Education (CBE) is established • Centralized approach for coordination UTM. • Slight decentralization on Community Based Education at college levels
Leadership Commitment	<ul style="list-style-type: none"> • Committed to create the structure and produce policies assign budgets, but less committed to create combined effects of the dimensions of UTM 	<ul style="list-style-type: none"> • Committed to create structures, produce policies assign budgets, but less committed to create combined effects of the dimensions of UTM

8.3. Stakeholders' Involvement

Two main stakeholders of the university are included in this study: namely community partners and university teachers. Concerning the former, both Addis Ababa and Jimma universities have opened their doors for the community partners to use university resources like the library, laboratories, playing grounds and they also give material support (through things like books and computers) to schools and other public sector institutions. However, it was found that the involvement of the external community in the universities' UTM activities is very limited in both Addis Ababa and Jimma universities. The role of the community is more of facilitating and assisting the university to implement its projects and help students finish their internship or projects. Reciprocity and mutual benefits between the university and the community seem not to

be developed in both universities. The relationship between the university and the community is largely university-dominated and unidirectional.

Concerning teachers, in both universities teachers were found to have good knowledge about the missions of their respective universities in general, but they showed less awareness about what is formally considered as UTM at their university and why. These teachers have also shown that they have more knowledge about, a better attitude towards, and higher involvement in community service/engagement and continuing education than the technology transfer and that they often lack the confidence to speak about the technology transfer activities. There are also confusions in both universities about the differences among the different components of UTM. The following table presents an overview of the teachers' awareness of teachers on a mission in general, UTM, the dimension of UTM, and activities of UTM

Table 28: Cross case analysis on the awareness of teachers about the missions of the university

	Addis Ababa University	Jimma University
Mission	Aware of the missions of their university	Aware of the missions of their university
UTM	Somewhat aware	Aware a little
Dimensions	Well aware of the community service/engagement aspect Somewhat aware of continuing education and technology transfer	Well aware of community service/engagement and continuing education Very little awareness on technology transfer
Activities	Somewhat aware of community service/engagement, technology transfer, and continuing education Activities	Well aware of the activities of community service/engagement and continuing education Little awareness on activities of technology transfer

The awareness shown by the teachers drops concerning technology transfer activities. Addis Ababa university teachers were found to have a relatively better awareness but teachers in both

universities have reported that they have confusion among the dimensions of UTM, particularly between community service/engagement and technology transfer. Regarding the benefits of engaging in UTM, teachers in both universities know somewhat about the benefits of engaging in community service/engagement and continuing education. Jimma University teachers reported that they know little about the benefits of engaging in technology transfer while Addis Ababa University teachers reported they are somewhat aware of the benefits of engaging in technology transfer activities. Teachers in both universities have shown generally the same kind of attitude towards UTM. While teachers could not decide if they have an appositive or negative attitude towards community service and continuing education, teachers in both universities have shown negative attitudes towards technology transfer activities. This fact is also raised during the interview with the officials, particularly the official from Jimma University stated that technology transfer activities are widely considered as the only job of technology institute teachers.

Table 29: Cross case analysis on the attitudes of teachers towards UTM

Components	Universities Addis Ababa	Jimma University
Community service	Ambivalent(Cannot decide if they have positive or negative attitudes)	Ambivalent
Technology transfer	Negative attitude	Negative attitude
Continuing education	Ambivalent	Ambivalent

Table (29) above shows that universities should work very hard to create positive attitude toward the teacher if they are to institutionalize UTM. Without the commitment of teachers, policies and formal structure the universities cannot be effective. Institutional theorists also suggest that in

line with the regulative pressures (policies, rules, and procedures), cultivating cognitive pillars like share beliefs, values, and behavior patterns are important (Scot, 2008).

When it comes to their involvement, the result of the one-sample t-test states that teachers of both universities have a limited (sometimes) involvement in community service/engagement and continuing education, while they hardly participate in the technology transfer activities. It seems from the findings that teachers in both the universities are not accustomed to the activities of the universities' technology transfer.

CHAPTER NINE: DISCUSSION OF CORE RESULTS

The current study was aimed at investigating how UTM has been institutionalized in Addis Ababa and Jimma Universities. In so doing, two basic questions were forwarded in the study: (i) How is UTM described in the national policy context? (ii) How is UTM institutionalization at

Addis Ababa University (AAU) and Jimma University (JU)? To answer these questions both qualitative and quantitative data were collected at national and institutional levels. The data were organized and analyzed in order to reach conclusions. To this end, it was found out that even though the national policies and strategic documents back the agenda of UTM, the conceptualization of the term is awkward. Moreover, the emphasis given at the national level was also found to be low. The data collected at the institutional levels reveal that the institutionalization of UTM at both universities was at its early stage. The coming pages present the discussion of these findings in relation to the existing literature and previous studies on the area.

9.1. National Policy Environment Vis a vis UTM

The national policies (education and training policy, higher education proclamation, growth and transformation, education sector development program V, and science, technology, and innovation policy) were reviewed in order to explore the emphasis given for UTM at a national policies' level. Consequently, even though the emphasis varies from one policy document to the other, the issues of UTM is described in all the documents. During the review, due emphasis was placed on the Higher Education Proclamation (2009) as it is the main policy document that governs the universities in Ethiopia. In this policy document, teaching, research, and community service are stated as the first, second, and third missions of HEIs. However, while it gives deep explanations on the first and second missions, the proclamation fails to give detail of what the third mission constitutes.

Inconsistencies were also been found in defining the mission in this proclamation. While the nomenclature 'community service' is used in one place, 'consultancy and supplementary

activities' was used in another place to denote UTM. Needless to say, this lack of clarity and in-depth description of UTM at the national binding policy level would obscure the implementation of it at the institutional levels. Even though policy pressures have been deemed important drivers of institutionalization (Sanchez-Barrioluengo 2014; Pinheiro, Langa & Pausits 2015), unclear policies can cause more disruptions than their absence (Rossi & Rosli 2015). Furthermore, the documents reviewed at the national level use different nomenclature to denote the UTM. Community service (the proclamation), community engagement (ESDP V), consultancy and supplementary activities (The proclamation), and technology transfer (STIP, the proclamation, GTP II) are some of the nomenclature used. Had the difference been the usage of the nomenclature, there could not have been much worries as differences in naming is common across universities (Mugabi, 2014). But, what was seen on the reviewed documents is a discrepancy in the conceptualization.

It has also been found (from the interview with official from MoSHE) that even if MoSHE seems to be ready to support universities on UTM, it can be concluded at this point that the ministry has not offered enough support for UTM hitherto. This weak support from the government was attributed to a couple of factors: lack of clarity on the concept of the third mission, academic culture, and poor commitment from the universities. Financial constraint was also raised as one challenge. This finding is in line with Fonseca (2018). She studied the situation of UTM at the University of Aveiro, Portugal, and stated that the poor support from the government is one of the main challenges that had prohibited the success of the university in its UTM activities. She further stated that governments often lack the resources and skills required to engage effectively with universities, particularly in the field of innovation (Fonseca, 2018)

9.2. Institutional Orientations of Addis Ababa and Jimma Universities

This topic discusses the two indicators of the institutional orientations proposed by the analytical framework of the study. These indicators are conceptualization of UTM and how this UTM is integrated in the mission statements of the universities.

9.2.1. Conceptualization of UTM

The process of defining a word or term in order to gain a common understanding of its meaning is taken as a process of conceptualization (William & Linton, 1986). According to Scott (2001), an action system is said to be institutionalized when the actors orient their action to common normative standards and values (conceptualization). The following section deals with how AAU and JU conceptualize UTM.

The analysis of data reveals that the conceptualization of UTM at Addis Ababa University is generally vague. Community service is taken as the UTM at Addis Ababa University. However, the way community service is conceptualized in the documents is not consistent. It has been witnessed that even in the framework for community engagement of the university, there are two types of definitions. One of the definitions states that community service is totally done by academic staff (the delivery of research output or innovation by academic staff targeted at community development) while another definition does not mention who should conduct community service (the delivery of research output or innovation targeted at community development).

The above difference can create a considerable conceptual gap. The first gap is that if students and other staff members come with innovative ideas and want to transfer this to the community, is that not community service? The other gap is that the definition disregards the collaborative

nature of community service. However, as can be remembered, one of the officials states, “...nowadays we are being requested to use the term community engagement than community service even though the difference is not clear for most of us...” Thus, if they decided to use community engagement instead of community service, the aim should be creating two-way communications with the community for mutual benefits. Research also suggest that any community service work is effective when it is done in collaboration with stakeholders when it engages the community (the holder of the issue or problem to be solved) (Ofuoku, 2011).

Contrary to this, the way the term is conceptualized in Addis Ababa University is too narrow to be taken as UTM. The definition of community service should have been broader enough to show strong commitment towards partnership and collaboration of the university with the community. What is defined, however, is more of a one-way process from the university to the community.

Furthermore, it has also been found that the boundary between technology transfer and community service concepts is vague. On the reviewed policy documents, these two terms are conceptualized in an almost similar fashion, but in practice, the two activities are separate entities and even though the university started to use the term ‘community engagement’ for its UTM, technology transfer is not considered part of this community engagement. The reason stated by the University not to include technology transfer activities under community engagement is marginally touched in one of the paragraphs in the community engagement framework (AAU, Framework for Community Engagement, 2017: 12). The reason is that the university benefits (financially) from the process of technology transfer. Nonetheless, community engagement by its very nature prioritizes mutual benefit and reciprocity (PRIA,

2015). If the university does not want to the mutual benefit, why has it changed the mission from community service to community engagement?

Ramussen (2006) and Thursby et al (2001) write that technology transfer is a continuous process characterized by the transmission of knowledge generated by the university to an enterprise or any community group that allows innovating and expanding its technological capabilities (Rasmussen et al., 2006; Thursby et al. 2001). Here, it can be seen that the core idea behind this definition is just the transfer of knowledge (and technology) to the community, which is also the nuts and bolts of community service/engagement according to the Rasmussen and Thursby (both op cit) as well as Molas-Gallart et al. 2002). Paradoxically, this kind of technology transfer is not considered as community service/engagement (UTM) in AAU's conceptualization.

The concept of community service at Addis Ababa University is also presented in a somewhat inconsistent fashion in the documents for the university strategic plan and community engagement framework. The strategic plan does not include volunteerism under community service, while the community engagement framework of the university and the result of the interviews suggest "voluntarism" is one of the basic strategies to promote community service in the university. This means confusion has not been cleared hitherto. Moreover, the difference between community service activities and university-industry linkage activities are also somewhat unclear. In AAU's conceptualization, the delivery of research output/innovation to the industry is university-industry linkage, while the delivery of research output/innovation to the community is community service. The former has not been considered UTM while the latter has been taken as UTM. According to Olsen (2007) and Carot et al., (2012), organizing the activities of UTM like this might be possible, but it creates confusion and overlap of actions, as these are very interrelated activities.

As can be recalled from page 113 of this thesis the strategic plan of the university seems to admit that there are confusions regarding the conceptualization of UTM. The strategic plan states on its SWOT analysis that there is a “lack of clarity of the concept of community service” (E.g. no distinction between income generation and voluntarism) among the University’s community” (AAU, Strategic Plan, 2015: 17).

It is not uncommon that different scholars use different definitions and focus on different aspects of UTM (Berghaeuser1 & Hoelscher, 2019). There are several general definitions of UTM. It can be defined as an engagement in non-academic activities (Molas-Gallart et al. 2002), or as opening HEIs to its surrounding society in the name of service to develop both HEIs and society (PRIA, 2015). The UTM is also defined in the policy documents, briefly as communities’ engagement (B-HERT, 2006) or service to society (OECD, 2007:37). Based on a literature review one can conclude that UTM is a global phenomenon with local characteristics.

The existing definitions of UTM vary in the scope of the included dimensions. Scholars in the area suggest that there are three main dimensions of UTM: Continuing education, technology transfer, and social engagement (E3M-Project, 2012, Berthold, Meyer Guckel, & Rohe, 2011). It seems like there is a consensus among the scholars that the above three dimensions denote the concept of UTM at large. Under these three dimensions, various elements can be taken as indicators of the dimension.

Table 30: Dimensions and indicators of UTM

Continuing education	Technology transfer and innovation	socials engagement
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<ul style="list-style-type: none"> • Human resource development • Lifelong learning 	<ul style="list-style-type: none"> • contractual and joint research • consultancy activities • University-industry linkage • patent registration • Technology business incubation • Science park 	<ul style="list-style-type: none"> • services for the retired senior personnel, • non-academic dissemination of research results, • social networking, • art exhibitions; • Public debate
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Source: Laredo, (2007)

Generally, it can be concluded that even though consensus could not be found among the participants of the interview and clarity is lacking on the documents regarding the conceptualization of UTM, community service is recognized as UTM at least at a rhetorical level. However, as defined above, community service at AAU seems to be too narrow to be taken as UTM and can only be considered as a part of UTM.

When we look at the way UTM is conceptualized at Jimma, there is also some confusion. The results from the document review and interview with officials reveal that as at AAU, the university acknowledges community service as its UTM while it could not be precise enough on what to be considered as community service. In order to make it active and inclusive (JU, Guideline for Community service, 2018), the university started to use the nomenclature ‘*community service and engagement*’ for this mission, even if the difference between community service and community engagement has not been mentioned clearly.

According to Castells (2001), it is not uncommon to see debate amongst higher education institutions and society at large regarding the concept of UTM, whilst the concept is relatively new. Jimma University has been using CBE (Community Based Education) to represent the

agenda of UTM (JU, Guideline for Community Service, 2018). However, the university could not upgrade Community Based Education as a lens through which it treats the agenda of UTM. Instead, it preferred to conform to the external pressure by creating different offices to the different dimensions of UTM and subsequently certain contradictions, inconsistencies and uncertainties arose concerning operationalization along with contradictions, inconsistencies, and uncertainties in defining the term UTM. What is defined in one document contradicts definitions in others. Moreover, there is no clear boundary among the dimensions of UTM. For instance, the boundaries among CBE, community service, and technology transfer are blurred. In line with this, Pinheiro, et. al., (2012) state that one of the main difficulties with UTM notion is that it has traditionally been much more broadly defined—also taken into account contextual circumstances—when compared to teaching and research, thus resulting in considerable ambiguity as well as ambivalence by university stakeholders.

Previous researches on the conceptualization of UTM reveal that universities get into confusion due to the broad definition they give to UTM (Jongbloed, Enders, and Salerno 2008; Pinheiro et al., 2015; Castells, 2001, Laredo, 2007). The current research, however, is unique to previous findings. It has been found in this research that the cause for the ambiguous and ambivalent concept of UTM is the narrow definition for the mission. The analysis was done on the community engagement framework of Addis Ababa University (p.107 of this thesis) as shown this. Here, it should, therefore, be noted that the problem related to the conceptualization of UTM could also arise due to the narrow definition one may give to the mission.

9.2.2. Integration of UTM into Mission Statements

Contemporary mission statements of the university integrate three specific components: teaching, research and public service (Scott, 2006), which taken together should explain the

institution's structure, the expected outcomes, and the terms for judging effectiveness, while also contributing to building organizational identity (Fugazzotto, 2009). Jongbloed, Enders, and Salerno (2008: 307) view a university's mission as a reflection of how the institution outlines its contribution to society.

In this regard, it is suggested that the role that universities take on within a society is a significant one and mission statements certainly as we have seen, do increasingly emphasize their third dimension, engagement with society (Laredo, 2007; Jongbloed, Enders and Salerno, 2008; Montesinos et. al., 2008). Yet often the basic purpose of this third mission refers only to knowledge transfer from the academic environment to the society and covers everything beyond traditional teaching and research (Jongbloed, Enders & Salerno, 2008). This includes workshops and professional development courses to establishing partnerships between educational institutions and the business community (Montesinos et. al., 2008).

Both AAU and JU have integrated UTM in their mission statements. All the three core missions of higher education institutions (teaching-learning, research, and UTM) are clearly stated. Generally, since mission statements hold the foundation for effectively designing and implementing an institution's strategy, which will lead to the achievement of institutional goals, (Jongbloed, Enders and Salerno, 2008), it is encouraging that both the universities have included UTM in their mission statements. Fugazzotto (2009), states that the language used to depict elements of a mission statement can also provide clues about an institution's relationship with the surrounding community, its status among peer institutions, its aspirations, and its priorities. According to him if a mission statement is articulated regularly by prominent administrators and other university officials, the culture and direction of the institution may be understood by stakeholders. Accordingly, previous research findings suggest that universities that clearly

integrated UTM in their mission statements can have well-articulated activities of UTM in their institutions (Montesinos et. al., 2008; Fugazzotto, 2009; Jongbloed, Enders and Salerno, 2008). The current study reproduces this knowledge to some extent and in some instances. However, in addition, it has found that though Addis Ababa and Jimma universities have clearly integrated UTM in their mission statements, they still failed to provide sufficient clarity on the activities of UTM to help stakeholders (teachers and the community) feel comfortable in describing what UTM stands for at the university. Hence, this could suggest that integrating UTM in the mission statements could not guarantee the proper application of the mission.

9.3. Institutional Support of AAU and JU towards UTM

This section discusses the findings from three sub-themes: Policies and Strategic Documents on, Organizational structure and approach towards and leadership and support of Addis Ababa University towards UTM

9.3.1. Policies and Strategic Documents

Developing a policy is a very important step towards institutionalizing any activity in an organization (Squires, Moralejo, & LeFort, 2007). Institutional theorists also suggest that the regulative pillar of the institution such as legal systems, policies and rules are essential steps of the institutionalization process (Barnett & Carroll, 1993). Thus, in the process of institutionalizing UTM, the importance of policies, strategic plans and legislations is essential (Eva, et al., 2018). With respect to producing policies and relevant documents on UTM, both Addis Ababa and Jimma universities have been found to have good initiations, particularly on producing policies for community service/engagement and technology transfer dimensions. However, both of them have failed to develop policy documents on continuing education aspect.

Even if the universities develop policies for some of the activities of UTM, the value of UTM is generally underestimated in the grand regulative document of the universities- the senate legislation. In this document, the attention given to UTM in both universities is very minimal. Moreover, in all the documents reviewed, there are inconsistencies and ambiguities in the conceptualization of UTM. Inconsistent with the current finding, it has been found that UTM has been conceptualized ambiguously and inconsistently across regions, types of universities, and even academic disciplines (Kruss, 2012, Benneworth & Sanderson, 2009).

When compared to the findings of previous researches, the current finding is different in two ways: First, previous researchers had found out that universities prioritize the development of policies and strategies for the technology transfer aspects of UTM (De La, Eva, Perez-Esparrells, and Casani, 2018; Perez-Esparrells et al., 2015). This study, however, has found that the technology transfer aspect of UTM had not been given emphasis (priority), particularly not at Jimma University, which has only very recently developed formal written guidelines for technology transfer. Second, previous researches and related literature suggest that universities have a long tradition of developing policies for continuing education (Schejbal & Wilson, 2008). Though the two universities under this study have a long history of continuing education; they did not develop a policy for the continuing education aspect of UTM.

9.3.2. Approaches and Coordination

The organizational structure of higher education institutions refers to how responsibilities and spheres of authority are divided among academic and administrative units, and how coordination

is realized among them (Boer et al. 2006). Benneworth, and Sanderson (2009) argue that universities create institutional structures to allow managers to control uncertainties and manage risks. Universities have, over the years, devised a series of new structural arrangements in order to more systematically engage with the surrounding society. Examples include, but are not limited to, Technology Transfer Offices business incubators, science parks in the campus vicinity, green houses, applied centers of research and innovation, continue education units, etc. (Pineiro, Benneworth, & Jones, 2012). This is true also regarding the two universities in the present investigation. Examples include, but are not limited to, Technology Transfer Offices, Business Incubators, and Science Parks in the campus vicinity and Applied Centers for both Research and Innovation and for Continuing Education. Yet at the same time there are some problems of implementation according to the research interviews and some question marks regarding organizational fluency and role assurance according to the questionnaire data.

In illustration of these complications, AAU has an established office for the three dimensions of Universities' Third mission- technology transfer, continuing education, and social engagement. However, the offices are not organized under the same management span and a clear distinction between the roles of the offices is lacking, particularly concerning the differences between the office of UIL-TT and community service/engagement that inhibits the effectiveness of UTM of AAU according to informants. This is in line with previous research too. Previous research suggests that the degree of internal coupling between main structures and activities are essential to create mutually reinforcing synergies (Clark, 1998; Nedeva, 2007) relating to the validity of external engagement and organizational fluency. These things arise in the ways that intentions are coupled to activities and are able to derive power, legitimacy, and the supply of resources within the institution. To put in other way, effective external engagement depends on having

mechanisms within the university that couple these external activities to ‘core’ activities in ways that legitimize them and prevent them from remaining peripheral (Pinheiroetal et al., 2012).

The data on the approaches and coordination of UTM at Jimma University shows that it has all three dimensions of UTM and also connects the university with the community through its known modality of community-based education, CBE. The university coordinates community service and engagement, and university-industry linkage and technology transfer under the vice president for research and community service. It, however, coordinates continuing and distance education and community-based education under the academic vice president and both community service and engagement, and university-industry linkage and technology transfer offices lack an extended managerial span at the academic units’ level like colleges and departments. This lack of decentralized activity is a problem in that it would be difficult to make these activities part of the daily job of teachers, like the two traditional missions (teaching and research). Moreover, a horizontal line of communication among the different UTM offices has not been formally established and there is, therefore, role confusion across the offices that blurs the different dimensions of UTM and blocks actions based on communicated knowledge. This impedes the institutionalization of the mission (UTM) as the institutionalization of practices requires the mindful engagement of individuals (DiMaggio and Powel, 1991).

Third mission activities involve a combination of factors. Sanchez-Barrioluengo et al. (2014) state that universities’ historical background which have developed over years, such as internal capabilities, cumulative experiences, as well as conscious strategic efforts to build new capability and resources for certain targeted areas of third mission activities, are all involved. The results from the present investigation confirm this and give a further illustration. However, the research here also goes beyond the contribution made by previous research to some degree as previous

research on the UTM mainly focuses on dimensions and indicators (Laredo, 2007; Olsen, 2007; Carot et al., 2012:), policies (Perez-Esparrells et al., 2015), conceptualizations (Pinheiro et al., 2015). No study has tried in the way the present one does - exploring how the different dimensions of UTM could be coordinated and on the possible role confusion which could be created as a result of fragmented coordination. This investigation, therefore, has tried to throw light on the problems related to the coordination of the different dimensions of UTM.

9.3.3. Leadership and Support

From the presentation on leadership commitment, it can be implied that even if the leadership exerted some efforts to establish offices, appoint professionals, and produce guidelines, there is a lack of leadership commitment in dealing with the core issues related to UTM at AAU. For instance, when it comes to practical issues, like creating shared meanings on UTM, assigning clear budgets, involving the faculty, students, and external community, and decentralizing the activities of UTM to academic units, the work done is far behind what should be done. It was also found that the commitment of leadership at Jimma University does not seem to be beyond rhetoric. It can be implied from the interviews' data that the organizational structures are in place for the activities of UTM at Jimma University, but these structures are not functioning well due to the lack of commitment from the high-level leaders. This finding is in line with what Mugabi, (2015) identified. He states that even if most of the universities in Africa have organizational structures in place to promote the third mission activities (Mugabi, 2015), these universities have not yet fully integrated the third mission into their budgets, teaching and learning, and research activities (Ntseane; 2012, Preece, Ntseane, Modise, & Osborne, 2012).

9.4. Stakeholders' Involvement in UTM

According to Jongbloed et al. (2008), the societal legitimacy of higher education is being increasingly evaluated by the level and quality of the higher education institutions' commitment to its community of stakeholders and is essential of greater depth than the simple establishment and maintenance of contacts. They went on explaining that societal legitimacy means that the institution searches and adopts means of involving the stakeholders to perceive how the latter values the services provided and how they feel these services could be extended and improved.

This section discusses stakeholders' involvement (community partners and university teachers) in UTM activities of AAU and JU. The discussion starts with the involvement of community partners and goes to university teachers' involvement in UTM.

9.4.1. Involvement of Community Partners in UTM

The interviews with both the university officers and with external partner representatives make clear, as is apparent also from the policy text analysis, that AAU is extensively engaged in many community service activities. However, at the same time, according to external partner representatives, the involvement of community partners in these activities is limited to giving assistance and a strong partnership with mutual benefit and reciprocity between the university and the community has not been developed. Put another way, even if the university changes the name of its third mission from community service to community engagement, the concept of partnership is still rather weak to be considered as an engagement. Mutual benefit and reciprocity are codified hallmarks of community engagement as these two terms describe partnerships in the Carnegie Foundation's definition for the elective classification (Carnegie, 2008) and this type of reciprocal relationship with mutual respect and involvement is not what is present according to

the analyses. In order for a partnership to be reciprocal, partners must be involved in all steps of a project and this has obviously not been the case here.

In illustration of the above, to achieve standards of best practice for community-based participatory research, community partners should participate in identifying the area under inquiry; the selection of questions, approaches, and methods; the interpretation of the data for analysis; the dissemination of the findings; and the review or evaluation of the activities and partnership (Israel, Schulz, Parker & Becker, 1998), none of which have been possible to identify in the research data and thus the mutual benefits have also been limited. At Addis Ababa University for instance, according to all data sources, community-university engagement lacks any kind of mutual benefit. External partners are not involved in setting desired academic outcomes related to student development, scholarly advancement, and nor are they asked for commitments in relation to institutional priorities or the organization's mission and priorities. The mutual benefit does not imply equal benefit – that each will get the same outcome (Bringle, Clayton, Price, 2009; Bringle & Hatcher, 2002). Rather, mutual benefit recommends equity – that partners achieve the outcomes that are just and meaningful to them. The data make things very clear in this respect. This simply does not happen at AAU.

The outcomes of the analysis of the collected data sources for Jimma University were broadly along the same lines regarding mutual and reciprocal engagement in UTM activities as at AAU. Once again, as for AAU, it was found that the involvement of the external community in the university's community-related activities was(a) very limited,(b) university dominated and (c) extensively (to the extent of almost exclusively) unidirectional. There are a number of touchstones in relation to these claims. They include the involvement of the community, for instance, in community service projects, which were essentially limited to only facilitating the

implementation. In other ways, the external communities' involvement in planning and organizing of community service projects was minimal, if not non-existent. Partnership collaboration has not ensued and the university seems to consider the external community as passive recipients of university knowledge and skills. Other researchers have pointed to similar limitations and difficulties, but amongst this research, Ofuoku (2011) for instance also argues that universities should not consider the community as solely passive recipients of general benefits but should not only allow but actually actively help them to form a more active voice in the university's activities to improve the value of their share and their benefits.

Boland (2008) also highlights the value of universities more actively engaging participants to engage in partnership rather than at best creating some kind of empty space for it to develop in. As Boland suggests, in an effective UTM project all stakeholders (students, alumni, communities, and staff) need to be engaged not only in the execution of activities (i.e. in implementation) but also at the planning level. Institutionalizing UTM and creating sustainable community partnerships requires universities to go beyond the organizational frame and to connect communities with faculty teaching and research (Bringle & Hatcher, 2002; Furco, 2001). The results from the present investigation suggest that this has not happened and that as a result the institutionalization of UTM has been incomplete and has lacked organizational fluency.

9.4.2. Involvement of Teachers in UTM

Under the teachers' involvement section, three categories were formed: teachers' awareness, teachers' attitudes, and teachers' involvement. Thus, the following discussion is also based on these categories.

9.4.2.1. Awareness of Teachers on UTM

Mission statements play an important role in the presentation of universities' understanding of their place in society (David & David 2003). If a mission statement is expressed regularly by university officials, the culture and direction of the institution may be understood by stakeholders. If it is not articulated frequently or is unclear, the mission statement may be ineffectual, and institutional priorities may be contested (Fugazzotto 2009; William & Lanford, 2018). Mission statements in higher education integrate three specific components: teaching, research, and public service, (Scott, 2006), which are taken together should define the institution's structure, the expected outcomes, and the terms for judging effectiveness, while also contributing to building organizational identity (Fugazzotto, 2009)

In the present investigation, the awareness of teachers about the mission of their university in general and UTM, in particular, was assessed. The results showed that teachers in both AAU and JU have shown a high level of awareness of the general missions of their University. It seems from these results that the universities have communicated their mission statements to the teachers. However, teachers in both universities were found to have little knowledge on what is considered UTM in their universities. This finding is in line with the findings of the interview and document review where university officials and documents were found to fail to clearly define UTM.

Previous research has also confirmed that there are misconceptions regarding UTM in many universities for many stakeholders. For instance, Mugabi, (2014) and David, (2018) found that misconceptions and inconsistencies are common problems related to UTM in different universities. This is true also according to Baum and Powel (1995), who in addition pointed out that misconceptions are obstacles for the institutionalization process of any activity, as they affect legitimacy. In the theory of institutions, once a particular practice or outcome is legitimated, it is built into social order and less open to overt contestation (Jepperson, 1991). By inference, this entails that the UTM agenda might not obtain the levels of legitimacy from teachers and officials as it might, as there are confusions about the conceptualization.

The findings on the awareness of teachers on the dimensions of UTM reveal that both AAU and JU teachers have reasonable levels of awareness about the community service dimension of UTM. Addis Ababa University teachers have reported that they know somewhat about how continuing education and technology transfer dimensions of UTM are defined in their university. Jimma University teachers on the other hand reported that they have little knowledge on the technology transfer dimension of UTM while they reported to have a high level of awareness on continuing education. Thus, whilst generally, teachers in both universities have good awareness about the community service dimension of UTM, the questionnaire data nevertheless indicates assurance and low levels of awareness about the technology transfer dimension. This was so particularly at Jimma University and the results of the interview with the officials also reveal that little attention is given for the technology transfer dimension of UTM there. This applied somewhat at both but was very pronounced at Jimma University in particular.

The long tradition of university service in Ethiopia, particularly in Addis Ababa University, (Teferra, 1997) and the CBE in Jimma University (JU, Guideline for Community Service, 2018),

might have helped teachers at both universities to feel more assured about their knowledge about community service/engagement, whilst the relative novelty of technology transfer might have contributed to a lower level of recognition. This may also be a broader trend that extends well beyond these two universities alone. Technology transfer activities in most universities are immature (Eva, et al., 2018).

One of the things in the questionnaire data that I found surprising initially was that AAU teachers lacked confidence in their ability to speak about continuing education. Given the long history of continuing education at Addis Ababa University (Wondwosen, 2019; Balsvik, 1985) and elsewhere in the world (Hutchins, 1968), I found this to be unusual. In my view, AAU teachers should have been able to speak more assuredly about how continuing education is conceptualized in their university, but they did not do this. However, the results of the interview and document review also reveal that there is no clear policy document for continuing education in both universities. There was very little at all about the issue at AAU and the guidelines produced by JU were as much related to the way distance education is carried out in the university as they were to continuing education.

Teachers were also asked about their knowledge of the specific activities categorized under each dimension of UTM. The results reveal that the awareness shown by AAU teachers concerning the different activities of the three core dimensions of UTM was rather low. They simply responded that they know *somewhat*. Jimma University teachers also reported that while they have a high level of awareness on the activities of community service, they reported that they know only somewhat about the specific activities of technology transfer and continuing education. This finding is not far from what has been found by other scholars in the area. According to Pausits (2011) for instance, since the focus of universities on the dimensions of

UTM might be different, confusion regarding the specific activities may happen. He further states that some universities may not embrace third mission as widely as others. Some universities may address the social engagement dimension, while others may address the technology dimension, and some others may focus on continuing education or the combination of them.

The knowledge of teachers about the differences among the three core dimensions of UTM was also assessed in the questionnaire. Accordingly, teachers in both the universities labeled their knowledge about the differences between community service/engagement and technology transfer as *little* while they reported that they know *somewhat* about the difference among the other dimensions. One of the things found during the qualitative part of this study was that there are confusions regarding the activities of community service, technology transfer and sometimes continuing education at the universities. The questionnaire results tend to support this as the combination of two or three aspects of UTM appeared to create complexity which confused the teachers. Cross, David & Shonubi (2014) explain this scenario as follows:

Universities that are teaching-oriented may address the social engagement dimension, while universities that are research-oriented may address the innovation dimension and universities that are labor market-oriented may address the entrepreneurial dimension. However, universities with a specific focus or a combination of two or three focuses may involve in one or more dimensions, although the intensity of their third mission activities (p.6)

Regarding the benefits of engaging in UTM, teachers in both universities reported that they know somewhat about the benefits of engaging in community service and continuing education. Regarding technology transfer in the UTM, Jimma University teachers reported that they know little about the benefits of engaging in technology transfer while Addis Ababa teachers reported

that they know somewhat. These suggestions from the questionnaire fit in well with issues that were raised by informants during the interview session concerning the benefit that engaging in UTM brings to the teachers. As the interviewed officials also identified, teachers, cannot be forced to engage in UTM as far as some kind of load is assumed for the time they scarify (PVP). The legislation also gives a little point for UTM as a criterion for the tenure and promotion of academic staff. Hence, as the officials said, teachers may not see any benefit from the activities of UTM. Hence, the finding from the quantitative data is in line with what was found from the qualitative part.

9.4.2.2. Attitude of Teachers towards UTM

The attitudes of teachers towards UTM were also assessed in the questionnaire. The result shows that teachers in both the universities were unable to decide whether they had positive or negative attitudes towards the university's community service/engagement and continuing education. Regarding the technology transfer dimension of UTM, however, teachers in both universities seem to have unfavorable attitudes towards this dimension. However, also the previous discussions about the awareness of teachers suggested that even if the general awareness of teachers regarding UTM was found to be low, this was particularly so for technology transfer. Hence, it is unsurprising to get such a result on their attitude towards this dimension (technology transfer) and may suggest that universities have done little to embed technology transfer activities in the academics' day-to-day activities. Moreover, so far we have seen that very little credit was assigned for activities considered as UTM for staff tenure and promotion of the university. These facts coupled with the novelty of the concept of UTM, particularly the technology transfer aspect, means it should in no way be considered strange for teachers to show negative attitudes. Previous studies also confirmed that as the concept of UTM (specially,

technology transfer, commercialization of research, IP creation) is a relatively new identity for the universities, resistance and unfavorable attitudes prevail while universities try to implement these activities (Etzkowitz et al., 2000; Plewa & Quester, 2007, Debackere & Veuglers, 2005

9.4.2.3. Involvement of Teachers in UTM

The last discussion regarding teachers is their involvement in UTM. So far it has been found out by the present thesis that there is generally low awareness about and unfavorable attitudes towards UTM at both universities. In the same fashion, the involvement of teachers in UTM is low. The finding on technology transfer is particularly poor. This finding is against previous research done by Berghaeuser & Hoelscher, (2019), who found out a high level of attention for technology transfer activities at German universities. In the current investigation, the technology transfer dimension is the dimension that lacked attention by the two universities (Addis Ababa and Jimma Universities). This shows that the institutionalization of UTM at the two universities seemed to be at its early stage. This is because that had the UTM institutionalized in the universities, the involvement of teachers in the activities related to UTM could have been high. In the institutional theory, a critical component of legitimacy is taken-for-grantedness (highest level of involvement) by stakeholders. *Taken for grantedness* is a micro-level process that complements legitimacy, and, in turn, furthers institutionalization. This concept was developed by Berger and Luckman (1967) as a means by which the social order is reproduced as human activity is shaped into patterns and shared meanings and becomes repeated, habitualized actions, which are subsequently externalized as objective reality.

CHAPTER TEN: CONCLUSIONS AND IMPLICATIONS

This study has investigated the institutionalization of UTM in two public universities: Addis Ababa and Jimma. The former is the oldest and flagship university of Ethiopia while the latter is considered as actively engaged in UTM. Two basic questions were posed: (1) How is UTM described in the national educational policies of the country? (2) How is UTM institutionalization at Addis Ababa and Jimma Universities? The second question has 5 interrelated specific questions:

- (i) How supportive is the institutional orientation of AAU and JU towards UTM?

- (ii) How effective is the institutional support of AAU and JU towards UTM?
- (iii) How do the community partners view their involvement in UTM?
- (iv) What is the current status of teachers' involvement in UTM?
- (v) What similarities and differences are there in institutionalizing UTM at the two universities?

Mixed methodology and exploratory sequential method were employed. Institutional theory has guided the investigation and semi-structured interviews, document reviews, and a questionnaire were the main data production methods based on purposive sampling. I classified the institutionalization process along four major dimensions: National policy context, Institutional Orientations, Institutional Support and Stakeholders' Buy-in.

10.1. National Policy Context Vis a Vis UTM

The national policy context in Ethiopia has been found to recognize UTM as one of the important missions of the University. However, there seems to be an entrenched problem of consistency in the reviewed national policies regarding the conceptualization of UTM. As can be recalled from the previous sections, the different policies reviewed in this paper use different nomenclature of UTM and define it differently. This implies that there is no consensus on the concept of this mission. Lack of emphasis for the UTM has also been found on the national policy documents. It has been explored that the weight given for the teaching and research missions at the national policies level had not been given for the UTM.

10.2. Institutionalization of UTM at the Universities' Level

Three general themes were discussed as indicators of the institutionalization process of UTM at the universities level: Institutional orientation, Institutional support, and stakeholders' involvement. Conclusions and implications regarding these themes are discussed in this section.

10.2.1. Institutional Orientation (the Mission and its Conceptualization)

Ethiopia has defined three main missions for Higher Education Institutions. These are the teaching and learning mission, the research mission, and the third mission, and all three of them are identified and attributed importance in the policy texts and discourses at Addis Ababa and Jimma universities that form expressions there for proposals about how their various organizations, institutions, and individuals are expected to proceed and go about their business. The UTM mission is described in detail. In line with the existing literature on the UTM (E3M-Project, 2012' Berthold, Meyer Guckel, & Rohe, 2011), the three dimensions of UTM; namely technology transfer, continuing education, and social engagement; are all visible and the integration of UTM into the mission statements of the universities has also been made. However, unlike the existing literature on the third mission, technology transfer and continuing education are not formally considered as UTM at the two universities and there are problems too in terms of some inconsistency in defining the third mission and some contradictions in terms of operationalizing the different dimensions of UTM.

There is a dilemma then, according to the policy analysis, but this is identified too also in the interviews with university officials, on what is counted as third mission or not. Both universities have branded community service/engagement as their UTM, but neither of them has managed to clearly and consistently define what community service/engagement means. The fact that both the universities have not decided which term (service, engagement, and outreach) to use for their

third mission complicated the conceptualization of the mission. Addis Ababa University has developed a framework for community engagement, but it is still using the nomenclature of community service. Jimma University announced that it uses the term community service and engagement, but it has only developed a guideline for community service. Furthermore, neither universities have managed to express clearly their rationale for moving from service to engagement, which may make the move seem random and haphazard

10.2.2. Institutional Support (Policies, Approach and Structure, and Leadership)

Both the universities have developed important policies and strategic documents. However, Addis Ababa University has taken the lead in developing policy documents on the dimensions of UTM, particularly on community engagement and technology transfer. Jimma University has very recently developed a guideline for community service project development and technology transfer. However, Jimma University has an established policy and practice in Community Based Education (innovative service-learning). Both of the universities have not developed a general policy for directing the continuing education dimension of UTM.

Instead of scaling up the existing community engagement approach in its Community Based Education, Jimma University has restructured itself to the Addis Ababa University's approach of treating the third mission. This means Jimma University used to orchestrate teaching, research, and service in its Community-Based Education (CBE). Currently, however, the university has shifted its attention to community service and technology transfer. Now, there is a huge similarity between Addis Ababa and Jimma universities in the institutional structuring of UTM.

In both Addis Ababa and Jimma Universities, even if offices are established for technology transfer, continuing education, and social engagement activities, there is no formal line of

communication among these offices. The differences among some of the activities of these three offices are blurred. This is particularly true for the offices of technology transfer and community service/engagement. Moreover, the activities of these offices, particularly the community service/engagement in AAU and both community service/engagement and technology transfer in JU have not been effectively extended to the academic units. Even though not well established, Addis Ababa University has tried to attach the technology transfer and continuing education activities to the associate deans in the colleges. Jimma University has a decentralized approach for CBE and continuing education, while the community service and engagement and technology transfer activities have not been extended to the academic units hitherto.

Regarding leadership and support, the leadership in both the universities have shown commitment in integrating UTM in their respective universities, opening offices for UTM, developing guidelines, and assigning budget. However, the leadership has found to be inactive in creating shared meaning of the UTM, extending the activities of UTM to the academic units, incentivizing the faculty, and creating a strong partnership with the community partners

10.2.3. Stakeholders' Involvement (Community partners and Teachers)

It has been found that both the universities have opened their doors for the community and are also doing various community service activities but documentation is generally weak, if relatively better at Jimma and there was little evidence of strong partnerships with community partners. Reciprocity and mutual benefits, which should be main principles, are absent and partnerships are uni-directional, and universities dominated. Yet genuine collaboration and mutual benefit are essential features of community engagement (Van de Ven, 2007). Moreover, in the institutional theory, the core assumption is that organizations are embedded in a broader

social context. They are deeply bound to an independent on this social context through the distribution of material resources and legitimacy (Krücken, 2003).

Regarding the involvement of teachers, even if the level of teachers' awareness on, attitude towards, and involvement in UTM vary across the dimensions of UTM, there seems to be generally reduced responsiveness on UTM. Teacher awareness on, attitude towards and involvement in community service/engagement, and continuing education aspects have been found to be better than the technology transfer aspects of UTM. Teachers in both the universities have shown low awareness, negative attitude, and rare involvement in the technology transfer aspect of the UTM. This generally shows that the activities of technology transfer in both universities have not got teachers' buy-in. This in turn means that even if the overall activities of UTM in both universities seem not to be mature, the universities have not given technology transfer as equal weight as the rest dimensions of UTM.

10.3. General Conclusion

Differences are to be expected in the institutionalization of UTM between “an engaged” university such as JU claims to be and an “ivory tower” university of the kind that AAU historically and currently strives to represent, but in this investigation, nevertheless, the similarities outnumber the differences. This is very obvious when the policy documents for the UTM are gathered and analyzed, and the outcome from these analyses is considered. It is also obvious too however when the interview transcripts produced from interviews with university officials and external partners at the two universities are compared and the questionnaire data-

based assessment of knowledge certainty and policy awareness among teachers is examined. What is less easy to explain is why this is so.

Competitions among universities are increasing as they chase grants for research excellence on the one hand, and seek legitimacy as socially relevant organizations on the other (Pinheiro et al., 2012). Consequently, despite their differences, universities are under pressure to adopt similar practices, with this then sometimes reinforcing ‘imitation drifts’ (Teichler, 2004:14). Such pressure could turn universities into isomorphic institutions (DiMaggio and Powell, 1983) and my suggestion is that this might be what has been seen in Addis Ababa and Jimma Universities in relation to the institutionalization of UTM.

Generally, unclear conceptualization of the UTM coupled with fragmented activities of UTM, and lack of stakeholders buy-in, the institutionalization process of UTM at Addis Ababa and Jimma Universities is at its early stage. According to the institutional theorists, if organizations do not have a common vocabulary for an activity or ambiguity surfaces regarding the role of the different actor in an organization; if boundaries between the different activities in an organization are blurred, and if the participation of key stakeholders is weak, the stage of the institutionalization process is at its early stage (Colyvas, et al., 2006; Mintzberg, 2009 Garud et al., 2007). All the indicators suggested by these scholars are at the heart of the institutionalization process of UTM at Addis Ababa and Jimma Universities.

10.4. Implications

Based on the above conclusions and discussions, the following implications can be extracted and suggested for further institutionalization of UTM at the universities under the current study:

10.4.1. At the National Level

So far we have seen that the conceptualization of UTM is problematic at the national policies level. One of the problems is inconsistencies and/or discrepancies on the way different national policies define the mission. In the institutional theory, an agreed-upon idea or concept is a basis for any institution to be established. In line with this (Lamont, 2012), states that if there is no clarity or a fairly agreed upon a concept for any activity in an organization, the activity would be unsystematic where there would not be distinct patterns. Likewise, for an organization to institutionalize its main activities, it should create a coherent account of the activities by categorizing the activities and applying patterns to connect to things done and felt before, or anticipating to activities in the future (Scott, 2001).

This calls for policy co-ordination that can resolve conflicts or inconsistencies between inter and intra policies. One way to solve discrepancies and inconsistencies in policy documents is through “collaboration” in policy making (Peters, 2015: 6). The logic behind the concept of collaboration is creating a common framework for a problem that multiple actors can accept and work with. This in turn calls for a holistic view which is based on the idea "everything influences everything else,"(Ruscio, 2003:12).

Moreover, the emphasis given for UTM at the national level has also been found to be minimal and this might create unbalanced treatment among the three missions of the university and impede the effectiveness of UTM at the university level. Thus, policies related to the UTM, particularly, the higher education proclamation should be revised so that it would place due emphasis on the UTM. The emphasis placed on the first (teaching) and second (research) missions of higher education institutions should also be given to UTM in the proclamation of higher education institutions.

10.4.2. At the Institutions Level

The current study also found out that common vocabulary for the UTM at Addis Ababa and Jimma Universities could not be found. In the process of institutionalization, creating a shared meaning of activities or practices is a basic step. Supporting this, Berger and Luckman (1967) describe institutionalization as a process whereby comprehensibility deepens and crystallizes. In their work, the initial stage represents incipient legitimacy, or a growing awareness that “this is how things are done,” and these routines take on a persistent or enduring quality. Hence it can be implied that without clear institutional orientations, the efforts of creating institutional support for UTM would be problematic Berger and Luckman (1967: 94-95). Thus, both Addis Ababa and Jimma Universities should start their institutionalization journey on UTM by clarifying or operationalizing the concept of UTM. If the confusion regarding this mission is not solved, it obscures not only the implementation UTM, but also the rest of the missions (teaching and research). Besides, the problem with the conceptualization may create fragmentations among the dimension of UTM which may end up with confusion of role (already happened in both AAU and JU) among the officials coordinating the different activities of UTM. Thus, Universities should clear the inconsistencies in defining UTM. Furthermore, these universities should not also add fuel to the fire by missing common nomenclature for their third mission. The universities should choose one nomenclature and operationalize it. In this regard, for instance, Jimma University can scale up its ‘Community-Based Education’ to make it an inclusive program that treats all the three dimensions of UTM (technology transfer, continuing education, and social engagement). Addis Ababa University, on the other hand, can stick to the nomenclature ‘community engagement’ and make this nomenclature inclusive of the three dimensions. Using the nomenclature ‘community engagement’ and making it too narrow to exclude technology

transfer activities like consultancies, university-industry linkage, and contract research would exacerbate the problems related to conceptualization.

Both universities have more or less developed policies to support the institutionalization of UTM. However, the different policies (guidelines) that these universities develop for the dimensions of UTM sometimes overlap and/or contradict each other. This might arise from lack of clarity on the interconnectedness of the dimensions of UTM. Hence, when producing policies (guidelines) for UTM, the universities should see the interconnectedness of the dimensions of the UTM through a holistic view. In order to reduce the fragmentation in the conceptualization and activities of UTM, a holistic view of the UTM should be adopted by the universities. Understanding that the dimensions of the UTM are interconnected would help the universities coordinate the various activities of UTM smoothly. Moreover, it (holistic view) also helps the university clear the blurredness of the boundary between the dimensions.

So far, it has been seen that the involvement of community partners and teachers in the universities' UTM activities is generally weak. The involvement of community partners is essential to the core community engagement principle of reciprocity and mutual benefit. These principles include seeking, recognizing, respecting, and incorporating the knowledge, perspectives, and resources that each partner brings to the collaboration. Increasing the extent to which the university respects reciprocity and mutual benefit with community partners are important for many reasons. For example, community viewpoints often enhance knowledge generation and potentially transform scholarship, practice, and outcomes for all stakeholders. Moreover, the community can be a good learning place for both the students and the faculty which in turn helps enhance the relevance and quality of education (Eyler and Giles, 1999).

The weak partnership with the community partners and lack of teachers' buy-in for UTM easily shows both universities have fallen short of the support they should get from the stakeholders (teacher and community partners). Generally, as faculty and community partners are key stakeholders, the activities of UTM that do not place due emphasis on these stakeholders could not be effective as the effectiveness of the university is largely dependent on the active involvement of these key stakeholders (Van de Ven, 2006). Losing the support of these stakeholders raises the question of legitimacy. Legitimacy is the core assumption within institutional theory which paves way for institutionalization (Meyer & Rowan, 1977).

Thus, if the universities are to successfully institutionalize UTM, creating a strong partnership with the community partners should be one of their priorities. Finally and above all, for deeper institutionalization of UTM, attaching the activities of UTM to teachers' daily routine could not be overemphasized.

In conclusion, both universities were also found not to extend the centralized offices for UTM to the academic units so as to attach the activities of UTM to the daily routines of the faculty. To achieve all the aforementioned suggestions, the leadership of the university should be committed to go beyond the rhetoric of UTM to decentralizing activities, assigning budget, involving and incentivizing the faculty and engaging the community partners in the decision-making process. Unless the leadership of these universities are committed to work on the practical issues of the UTM, it is unlikely for the formal organizational structures and guidelines to bring an institutionalized UTM. Thus, a key for institutionalizing UTM is not only dependent on the development of policies and procedures, rather on the extent to which practices become well-articulated in organizational routine (Colyvas, et al., 2006). Supporting this Clark (2004) states that universities should not develop policies and establish offices just for the sake of responding

to the regulative pressures from the government and other stakeholders from their organizational field, rather they should be committed to changing the policies into practice.

10.5. Limitations of the Research and Avenues for Further Research

This research has studied the institutionalization of UTM at two public universities in Ethiopia. In doing so, an analytical framework was adopted from different scholars. In this analytical framework, emphasis was given to the structure and strategies of UTM in the universities. Due to this, this study did not directly assess the practices of UTM in these universities. However, efforts were made to get an image of what these universities are doing on UTM through semi-structured interviews and document reviews. This was done through probing participants to bring cases and reviewing documents to see what these universities had done.

The analytical framework used in this study has also missed the inclusion of students as one of the key stakeholders of the university. Their (students) inclusion could have strengthened the findings of this research. In order to get a general insight into the involvement of students in UTM, interviewed officials were asked to put their perspectives on the involvement of students. However, I am cognizant of the importance of including students in this study so as to solidify the findings of the current study.

The units of analysis in this study are the universities i.e institutional level. This neglects the variation that may exist across the academic units. Finally, as the current study explored the institutionalization of the UTM at two purposively taken universities, its findings, notwithstanding their relevance, cannot be generalized to other universities in the country. Finally, data collection for the current research had been done during the periods from the beginning of 2019 to mid 2019. Any document (related to the current study) produced either by

the government or the universities later than the period mentioned above has not been included in the study. Hence, I am cognizant that all the above limitations merit further study in the area.

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APPENDICES

Appendix A: Consent Form

**Title: Institutionalization of Universities' Third mission: A Comparative Study between
Addis Ababa and Jimma Universities, Ethiopia**

My name is Muluken Nigatu, and I am undertaking research to examine how the third mission of universities' has been institutionalized in two public universities (Addis Ababa and Jimma) in Ethiopia, for my PhD.

I My research aims to discover the experiences and concerns of the above-mentioned universities towards their third mission (community service, community engagement or university outreach). The study also aims to provide knowledge that can impact on future third mission strategies of the universities under this study, in particular, while informing the higher education sector in general. To this end, I am particularly interested in your perspective.

This study will use semi-structured reflective interviews, similar to an everyday conversation, which will be conducted at a mutually acceptable time and location. It is envisaged that the one-off interviews will take about one and a half hours and will be recorded on audiotape with your permission. However, you are free to request that interviews not be taped, and if so I will request permission to take notes during the interview. In addition, tapes and transcripts from your interview will be destroyed should you decide to withdraw from the study.

The data gathered will be used in my PhD research and may also be used in journal articles or at conference or seminar presentations. In addition, I may also need to conduct a follow-up interview (most likely by telephone) in order to check on any issues that may arise over the research period.

I will contact you shortly to ascertain your level of interest and availability; and if you consent to participate in the interview we will arrange a mutually convenient time and location. Following the interview, you will be provided with two opportunities to review your comments:

1. A '**Member Check** – Summary Document' will be sent to you to review and provide feedback on. A transcript of the interview will also be made available to you upon request.
2. A **copy of the draft Findings** Chapter will be sent to you at a later stage for review and verification. No information given in the interviews will be made public in any form that could identify you, and pseudonyms will be used to protect your identity.

Participation in the study is strictly voluntary and your confidentiality is assured. If you decide to participate, you are free to withdraw and discontinue participation at any time. You may also elect not to answer any questions asked.

My research is being conducted under the supervision of Professor Dennis Beach(Gothenburg University) and Dr. DessuWirtu(Addis Ababa University). If any issues or questions are raised as a result of your participation in this research please contact Dr. DessuWirtu, on +251912041575

,or emails: dvirtu@ymail.com or Dennis.beach@ped.gu.se .

Name of Student: Muluken Nigatu, PhD Candidate

Center for Comparative Education and Policy Studies, Addis Ababa University, Ethiopia

Telephone: +251911812049

Email: firishm@gmail.com

Yours sincerely,
Muluken Nigatu

Appendix B: Interview Guides

Interview questions for the Ministry of Science and Higher Education

1. What are the missions of universities in Ethiopia?

2. As a ministry, what activities do you expect the universities to include under their TM?
4. Do you think that universities are doing enough to promote the UTM?
5. What would you want them to do to promote the UTM?
6. Does the government provide enough support to promote the UTM among HEIs?
7. Does the ministry have policies and/or plans regarding the UTM?
8. How can the ministry promote the development of the UTM at universities?
9. Is the UTM part of the proposed changes in higher education?

Interview Guide for the interview with:

1. Vice president for research and community service,
2. Director for community service, and
3. Director for University-Industry linkage & Technology Transfer,
4. Director for distance and continuing education

Interview Guideline

The following key areas will be covered during the semi-structured reflective interview and will be used as a guide. However, the areas to be explored' will serve to remind me of areas that need to be discussed in relation to the topic rather than using specific questions in a fixed order. As this is a qualitative part of the study, there are no fixed set questions and this guide can be adapted as required. However, I will endeavor to ensure that all key areas are covered.

“Touching base’ and Background Information, about:

- The study
- General discussion about ‘university-community engagement’.

Areas to be explored:

- *Missions of the university*
- *Conceptualization (defining and understanding) of Universities' Third Mission*
- *Policy and strategy of the universities towards UTM*
- *Teachers' awareness of, involvement in, and support for UTM*
- *Students' awareness of, involvement in, and support for UTM*
- *external communities' participation in UTM of their respective university*
- *Commitment of the leadership of the university towards UTM*
- *Any challenge on the institutionalization of UTM*

Interview with an official from the office of vice president for research and technology Transfer/community service

1. What are the missions of this university? How do you define these missions?
2. To which mission(s) are you responsible for?
3. How do you define the third mission in your university? What is the name given to the third mission in this university?
4. Does the university have a policy for the third mission?
5. Is the third mission of the university included in the strategic plan of the university? How?
6. How is this mission coordinated in your university? Tell me the span of management on the third mission in this university! What are the main categories of the third mission?
7. Do you think that enough attention is given (by the university) for this third mission? As equal as the rest of the missions? Why? How?
8. Does the university incentivize and/or support the academic staffs' involvement in their third mission? How?

9. Does the university evaluate and reward the contributions of the academic staff to the third mission of the university? How? Are the evaluation processes and rewards appropriate?
10. Does the university offer students opportunities to interact with, contribute to, and learn from the external communities? What are the opportunities, and how adequate are they?
11. How do you involve external communities in the teaching, research or other activities in your universities?
12. What is your assessment of the commitment of the leadership of this university towards the third mission?
13. Are there any challenges to the third mission at this university? What are they?
14. If you have any comment or anything you want to add on the issues we raised regarding the third mission of this university...

Interview with an official from the office of community service

1. What are the missions of this university? How do you define these missions?
2. To which mission(s) are you responsible for?
3. How do you define community engagement (service) in your university?
4. Does the university have a policy on community engagement (service)?
5. Is community engagement(service) included in the strategic plan of the university? How?
6. How is community engagement(service) coordinated in your university? Tell me the span of management on community engagement (service)!
7. Do you think that enough attention is given for the community engagement(service) mission? As equal as the rest of the missions? Why? How?
8. Does the university incentivize and/or support the academic staffs' involvement in community engagement(service)? How?

9. Does the university evaluate and reward the contributions of the academic staff to community engagement(service)? How? Are the evaluation processes and rewards appropriate?
10. Does the university offer students opportunities to interact with, contribute to, and learn from the external communities? What are the opportunities, and how adequate are they?
11. How do you involve external communities participate in the teaching, research or other activities in your universities? How?
12. What is your assessment of the commitment of the leadership of this university towards community engagement(service)?
13. Are there any challenges to community engagement (service) at this university? What are they?
14. Does this office have horizontal or vertical relationship with the office of distance and continuing education and/or the office of university-industry linkage?
15. If you have any comment or anything you want to add on the community engagement(service) issues of this university...

Interview with the office of University-Industry Linkage and Technology Transfer

1. What are the missions of this university? How do you define these missions?
2. To which mission(s) are you responsible for?
3. Does the university have a policy on university-industry linkage and technology transfer?
4. Is it included in the strategic plan of the university? How?
5. How is university-industry linkage and technology transfer coordinated in your university?

Tell me the span of management university-industry linkage and technology transfer!

6. Do you think that enough attention is given to university-industry linkage and technology transfer? Why? How?

7. Does the university incentivize and/or support the academic staffs' involvement in university-industry linkage and technology transfer? How?
8. Does the university evaluate and reward the contributions of the academic staff to university-industry linkage and technology transfer? How? Are the evaluation processes and rewards appropriate?
9. Does the university offer students opportunities to interact with, contribute to, and learn from the external communities? What are the opportunities, and how adequate are they?
10. How do you involve external communities in university-industry linkage and technology transfer?
11. What is your assessment of the commitment of the leadership of this university to university-industry linkage and knowledge transfer?
12. Are there any challenges to university-industry linkage and technology transfer at this university? What are they?
13. Does this office have horizontal or vertical relationship with the office of distance and continuing education and/or the office of university-industry linkage?
14. If you have any comment or anything you want to add on the university-community engagement issues of this university...

Interview with the office of continuing and distance education

1. What are the missions of this university? How do you define these missions?
2. To which mission(s) are you responsible for?
3. Does the university have a policy on distance and continuing education?
4. Is it included in the strategic plan of the university? How?

5. How is distance and continuing education coordinated in your university? Tell me the span of management for distance and continuing education!
6. Does this office have horizontal or vertical relationship with the office of community service and/or the office of university-industry linkage?
7. Does the university offer students opportunities to interact with, contribute to, and learn from the external communities? What are the opportunities, and how adequate are they?
11. What is your assessment of the commitment of the leadership of this university towards distance and continuing education?
12. Are there any challenges to distance and continuing education at this university? What are they?
13. If you have any comment or anything you want to add on the university-community engagement issues of this university...

***NB. Prompts** will also be used when needed throughout the interviews to assist the researcher to delve deeper and to clarify aspects of what the participant has said. EG.*

- *How important is/was that to you?*
- *Would you be able to explain that a bit further, please?*
- *Is there anything else you would like to discuss in relation to community engagement in this university?*

Interview with Community Partners

1. Can you please tell me the missions of Jimma/Addis Ababa university?
2. How do you view your relationship between you and Jimma/Addis Ababa university?

3. Do you have the access to use the university's resources, like a library, laboratory, sport grounds, research findings... to support your organization's activities of for capacity building?
How?
4. Do you participate in the university's teaching and learning activities? How?
5. Do you have the opportunity to conduct researches with the academics in the university?
How?
6. Do you any kind of cooperation with the university in addressing societal pressing problems?
What?
7. Do you have a common understanding between your organization and the university on the issues you want to get capacity-building trainings? How? Why?
8. Does the university assess your needs and work with you towards satisfying those needs?
How?
9. How do you view your participation and involvement in the activities of the university?
10. Do you think that you have your voice in the university's core community-related activities?
How?
11. Do you think that the university has a strong relationship with the local community where this community to participate in planning and implementing its core missions? Why?

Appendix C: Qualitative Document Review

Focus areas

1. How does the proclamation for higher education define the three missions of universities?
Does the proclamation clearly state the third mission of the universities? How?
2. How is community engagement conceptualized in the policy document of the university?

3. How is community engagement addressed in the present strategic plan of the university?
4. How is community engagement being funded?
5. Does the universities' recruitment and promotion policy include university-community engagement as one of its focuses?
6. How do universities' annual reports discuss the universities' community engagement activities?
7. How is the documentation done regarding community engagement in the universities?

Appendix D: Questionnaire

Addis Ababa University

Center for Comparative Education and Policy Studies

**PhD Dissertation on ‘Institutionalization of Universities’ Third Mission in Addis Ababa
and Jimma Universities, Ethiopia’**

A Questionnaire to be Filled by University Teachers

Dear Teacher: I am a PhD student at Addis Ababa University, Centre for comparative education and policy studies. For the fulfillment doctoral degree, I am conducting a PhD dissertation entitled “‘institutionalization of Universities’ Third Mission’”. This questionnaire, therefore, tries to collect data from you on your awareness of, attitude towards and involvement in the Universities’ Third Mission at your university. For the purpose of this research, Universities’ Third Mission (UTM) can be generally defined as a mission of a university which deals with the interaction between universities and different stakeholders of the community, and business enterprises. There are no right or wrong answers, so please be as honest as you can with your opinions.

Thank you!

General Directions

1. You do not need to write your name.
2. Write short and brief answers and opinions for open-ended questions and additional options respectively.
3. Please follow the instructions provided at each part.

Part One: Personal Information

Please mark a tick “✓” in the box or write a short answer in the space provided for the required information.

1. Sex: A. Male B. Female

2. Age: A. Below 25 years B. 25-35 years C. 35-45 years
 D. 45-55 years E. Above 55

3. Your Faculty/college/institute/_____

4. Your title: A. Assistant professor B. Associate professor C. Professor

5. Your experience as assistant professor and above

- A. 2 to 5 years B. 6-10 years C. 11-15 years

- D. 16-20 years E. 21 and above

Direction One: The following are questions which are expected to measure your awareness of the third mission of your university. Please mark a tick “✓” in the box provided for each item.

A. Knowledge/Awareness of the Faculty on Universities’ Third mission

No.	Items	Very surely	Surely	somewhat	little	Not at all
	I am aware about the ...					
1.	Missions of this university					
2.	Definition of the third mission at the university					
3	Definition of community service/engagement at the university					
4.	Definition of technology transfer at this university					

5	Definition of continuing education at this university					
6	Activities considered as technology transfer at this university					
7	Activities that are related to university-industry linkage					
8	Activities considered as continuing education at this University					
9	Differences across the activities of technology transfer and community service/engagement,					
10	Differences across the activities of technology transfer, and continuing education at this university.					
11	Differences across the activities of community service/engagement and continuing education at this university.					
12	I am clear about the benefits of engaging in community service/engagement activities					
13	I am clear about the benefits of engaging in technology transfer activities					
14	I am aware of the benefits of engaging in the university's continuing education programs					
15	I know the organizational structure of the university regarding community service/engagement activities					
16	I know the organizational structure of technology transfer and innovation activities of the university					
17	The organizational structure of continuing education					
	If you want to add something on your knowledge about this University's Third mission, please					

	specify here <hr/> <hr/> <hr/> <hr/> <hr/>
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B. The attitude of the Faculty towards Universities' Third Mission

No	Item	Strongly agree	Agree	Can't decide	Disagree	Strongly disagree
18	I am happy to engage in community service/engagement activities of this university					
19	I am glad to participate in volunteerism activities of this university					
20	I want to participate in community service/engagement activities of this university only if it is paid					
21	I consider community service/engagement as a time-wasting activity					
22	I believe that community service/engagement activities should not be counted as one of the main activities of the faculty					
23	I do not feel comfortable when asked to engage in community service/engagement activities even if it is paid					

24	I like participating in public debates that may benefit the community					
25	I like having community-based teaching in my courses					
26	I believe that community-based research should be given due emphasis					
27	I do not want to waste my time on consultancy activities if not paid					
28	I do not like consultancy activities even if I make money out of it					
29	I believe that university- industry linkage should be given due emphasis					
30	I am happy to involve in any activity considered as technology transfer at this university					
31	I like participating in contractual research in this university					
32	I support continuing education to be one of the main activities of the university					
33	I would be happy if the scientific infrastructure like library, laboratory, databases would be open for the public to use					
34	I like disseminating my expertise to the community(for instance, research findings...) ...short term trainings					

C. Involvement of the Faculty in Universities' Third Mission

No	Items	Not at all	Rarely	I am not sure	Frequently	Very frequently
35	I participate in community-based research (conducting research in partnership with the community members outside of the university)					
36	I involve in community-based teaching (externship, practicum...)					
37	I have participation in voluntary services of this university in order to address societal problems					
38	I participate in consultancy and advisory activities in policy making issues					
39	I involve (contribute) in public lectures of this university					
40	I am involved in disseminating my expertise to the community (for instance, research findings...)					
41	I conduct community service/engagement activities as one of my daily activities in this university					
42	I Participate in giving different trainings for capacity development purposes					

43	I support my colleagues who engage themselves in community service/engagement activities					
44	I help my students involve in service/community engagement activities					
45	I help my students understand the importance of community service/engagement activities					
46	I engage in the university's university-industry linkage activities					
47	I involve in the university's different continuing education programs					
48	I try to create awareness in the community about the community service/engagement of the university					
49	I call upon some community members to come to my class and share their experience with my students					
50	I participate in the university's technology transfer activities					

If you have anything to add on the issue of Universities' Third Mission (community service/engagement, technology transfer and continuing education), please write below

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