

**GLOBALISATION AND ITS IMPACT ON HIGHER EDUCATION POLICY IN
ETHIOPIA**

by

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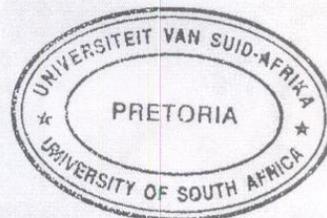
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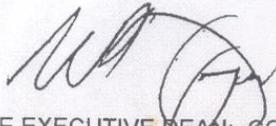
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DECLARATION

I hereby declare that the research titled *Globalisation and Its Impact on Higher Education Policy in Ethiopia* is my own work. I further declare that all the sources that have been consulted and quoted in this thesis have been duly acknowledged.

A handwritten signature in black ink on a light green grid background. The signature is stylized and appears to read 'Teklu Tafase Olkaba'.

Teklu Tafase Olkaba

11 January 2016

Date

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ABSTRACT

The impact of globalisation on higher education institution policies and government development policies are emerging issues among researchers and policy makers. Therefore, this study investigated the extent of Ethiopian universities in responding to the demands and realities of the local and global knowledge economy. The study explored a range of literature on globalization policy and its impact on higher education operations. Furthermore, the study explored the development trends of Ethiopian higher education within different national development policies with regard to the difference made in the current global knowledge economy. Based on the literature review, the empirical study examined realities of understanding in Ethiopian higher education and its institutional policy responsiveness to the current local and global knowledge economy. A mixed method research design was employed to generate empirical data. Six established universities were purposively selected for the study. From these universities 289 postgraduate students and 256 senior staff from the ranks of lecturer, assistant professor and associate professor were involved in the study. The findings of the study conclude that in the global knowledge economy, the role of higher education and nature of universities within it requires a change in policies and practices and systems, with respect to local and global contexts towards the creation of a distinctly new global model of higher education. The empirical study illustrates that responsiveness of Ethiopia higher education expansion and graduate mix policies formulated for local knowledge demand have brought a tremendous increase in enrollments within a short period of time. Graduate mix policy, curriculum standardization and the Bologna process are among the new reform policies endorsed in Ethiopian higher education. Further, findings of empirical study confirm poor responsive policies in research and innovation, socio-economic transformation, programme quality and graduate employment opportunities with regard to the current global knowledge economy. The study concludes that there is a wide policy gap in Ethiopian universities in knowledge production and dissemination in research and innovation which are required to respond to the demands and realities of local and global knowledge economy. Based on the findings of the study, recommendations are made and a model of higher education policy formulation is proposed for policy makers and higher education institutions.

Key terms: Globalisation, Internationalisation, Higher Educational Institutions, Global Higher Education Policy, Knowledge Economy, Knowledge Society, Ethiopia, mixed method study, survey,

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ABBREVIATIONS AND ACRONYMS

AAU	Addis Ababa University
BDU	Bahir Dar University
EGSECE	Ethiopian General Secondary Education Certificate Examination
EHEEE	Ethiopian Higher Education Entrance Examination
ESDP	Education Sector Development Program
ESDPs	Education Sector Development Programs
EUA	European Universities Association
FDRE	Federal Democratic Republic of Ethiopia
GTP	Growth and Transformation Plan
HERQAA	Higher Education Relevance and Quality Assurance Agency
HESC	Higher Education Strategy Centre
HRU	Haramaya University
HWU	Hawassa University
JU	Jimma University
MOE	Ministry of Education
MOFED	Ministry of Finance and Economic Development
OECD	Organization for Economic Co-operation and Development
TVET	Technical Vocational Education Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United State Agency for International Development

CHAPTER 1

BACKGROUND TO THE STUDY

1.1 INTRODUCTION

This chapter provides an orientation to the study. It begins with a brief historical background of critical issues in higher education in Ethiopia in the light of globalisation discourses. It presents an overview of globalisation discourses and a rationale of their impact on higher education. The statement of the problem, research questions, study objectives, scope and significance of the study are described in this chapter. The chapter provides a synopsis of the research design and ethical principles applied in the study. The chapter concludes with an outline of the organization of the thesis.

The last ten years in Ethiopia (2010-2015) have been characterized by endeavours to expand and diversify higher education programmes. Following the education and training policy of 1994, the education sector development programme was developed in order to translate policy into action in line with the government's five year strategic plan. The reform initiated by the Ethiopian government aimed at addressing the rapid changing global knowledge convergence that demands local and global knowledge integrity. However, the global responsiveness of Ethiopian higher education within the context of the current global demand may be questioned.

The emergence of the global knowledge economy has put a premium on learning throughout the world, which relies primarily on the use of ideas rather than physical abilities and on the application of technology rather than the transformation of raw materials or the exploitation of cheap labor. The global knowledge economy is transforming the demands of the labor market throughout the world. It is also placing new demands on citizens, who need more skills and knowledge to be able to function in their day-to-day lives. Equipping people to deal with these demands requires a new model of education and training. Developing countries and countries with transition economies risk being further marginalized in a competitive global knowledge economy because their education and training systems do not equip learners with the skills they need. To respond to the problem, policymakers need to make fundamental changes (World Bank, 2010).

Globalisation is bringing the world under one umbrella in which the development agendas of the nations are interconnected. Therefore, a roadmap for policymakers in developing countries is required with regard to the key issues in education in general and in higher education in particular. The widespread recognition that higher education is a major driver of economic competitiveness in an increasingly knowledge-driven global economy has made high quality higher education more important than ever in both industrialized and developing countries. It is an important form of investment in human capital development. Higher education is rightly regarded as the engine of development in the new world economy (Altbach, 2007)

Traditionally, nation-states developed their education policy in regard to what they saw as important to their nation. Putting it differently, education policy was mainly a national affair. However, within the wider context of globalisation, education is now regarded as an international commodity playing a remarkable mission in the global economy with investments in people, skills and knowledge. As the Organisation for Economic Co-operation and Development (OCED) (2008) points out, higher education contributes to social and economic development through the formation of human capital (primarily through teaching), the building of knowledge bases (primarily through research and knowledge development), the dissemination and use of knowledge (primarily through interactions with knowledge users) and the maintenance of knowledge (primarily through inter-generational storage and transmission of knowledge).

In the current transformation of nations into knowledge economies and knowledge societies, higher education provides not only educated workers but also knowledge workers who contribute to the growth of the economy. Higher education is ranked among the chief concern of nation states as it plays a tremendous role in shaping and preparing nations for the future in an increasingly globalized world (Ashcroft, 2011).

Since the endorsement of the current education and training policy of 1994, Ethiopia has engaged in a highly ambitious effort to re-align its higher education system more directly to its national strategy for economic growth and poverty reduction. The reforms have targeted all levels: the overall system, the institutions, and the academic programme (Teshome, 2003). The number of

universities changed drastically from two universities to 31 universities within the last twenty years. Within this expansion an attempt was made to diversify disciplines and human resource requirements in all development sectors (MOE, 2010). The massification of university enrollments in science, engineering and technology is the result of the new strategic approach of the government of Ethiopia. In this context, the government of Ethiopia is focusing on helping its tertiary education institutions to become more innovative and responsive to the requirements of a globally competitive knowledge economy. However, the question of policy viability with the notion of globalisation and the actual practices of the higher education institutions need critical investigation so as to harmonise them with globalisation policy notions.

1.1.1 An Overview of Globalisation Discourses

The concept of globalisation is encountered in the media, academic literature and everyday conversation. Most scholars involved in the globalisation discourses, if not all, agree that globalisation has had enormous impact on societies at the economic, political, and cultural levels. According to Damtew and Heinz (2010:94-96), globalisation "comprises multiple and drastic changes in all areas of social life, particularly economics and culture". The term globalisation has been seen as a buzzword by many researchers who understand it in various ways. In the context of higher education, it refers to the widening, deepening and speeding up of interconnectedness among universities in the global world. This implies that universities are no longer isolated institutions operating in particular towns or cities but are global higher education institutions that are connected to the global world, irrespective of their country of origin (Lam, 2010).

In fact, globalisation as a science overlaps and interacts with various disciplines such as economy, sociology and history. Thus, scientists and researchers of all disciplines define globalisation from their own point of view or from what concerns their disciplines. For instance, a global market could be a simple definition of globalisation by an economist. Despite the differences in the conceptualisation, there is great consensus among researchers that globalisation has made the world a small village through interconnectedness of the regions or even continents. Further, globalisation refers to "the intensification of the worldwide social relations which link distance localities in such a way that local happenings are shaped by events occurring many miles

away and vice versa (Knight, 2004:105). From the contemporary perspective, globalisation can be defined as a “widening, deepening, and speeding up of interconnectedness in all aspects of contemporary life, from the cultural, to the criminal, the financial to the spiritual (Evans, Pucik & Bjorkman, 2011:657).

For several decades globalisation has been seen as an economic phenomenon that creates worldwide economic integration under one policy umbrella. Free market policy has been shaped according to the ‘fit for purpose’ notion in different localities in response to the forces of globalisation. In similar vein, globalisation extends its pressure on higher education institutions as knowledge marketization and cross-border education according to different modes of approaches (Knight, 2004). As a result higher education is subjected to the dynamics of globalisation as a core force of rationalist and capitalist knowledge production to be governed by the global knowledge economy. Universities in the current global arena are expected to engage in social transformation to sustain both local and global development (Brennan, King, & Lebeau, 2004). Under the umbrella of globalisation, developed countries began to sell knowledge produced by their respective higher education to developing countries also in Africa (Brennan, King, & Lebeau, 2004). In order to respond to the forces of globalisation, developing countries are forced to expand and diversify their higher education systems. On the other hand the international community has responded to the forces of the globalisation by integrating elements of the higher education curriculum through standardisation, research collaboration, recruitment of international students and staff and common quality assurance standards of measurement that foster similar knowledge production (Altbach, 2007).

1.1.2 Knowledge Economy and Globalisation

The process of globalisation is changing the ways in which knowledge is produced, applied and disseminated through research and innovation. Universities, the most important institutions in the organisation of research and higher education, need to rethink their roles and functions and develop their capacities to anticipate and respond to these challenges (Aarts & Heinz, 2010). There is growing recognition that knowledge is the main driver of development. Any form of development, whether defined in social, human or economic terms, has become critically

dependent on knowledge. Countries with the capacity to generate and assimilate knowledge and the capability to use it to develop new forms of organization, products and services are better able to attract investors and to take advantage of new opportunities (Aarts & Heinz, 2010). Moreover, this applies not only to industrialised countries, but also to countries whose economies depend on the availability of cheap labor and the production of commodities. The capacity to assimilate knowledge is acknowledged as a key factor that will enable developing countries to catch up economically (World Bank, 2010)

At the global level, knowledge is needed to predict and to mitigate the impacts of climate change and global warming, which affect developing countries in particular. These effects may be global (rising sea levels), regional (more frequent floods in certain areas) or local (requiring changes in agricultural production methods). At the national level, health authorities need to know how to run a functioning health system that provides at least basic standards of public health and medical care and ensures the efficient use of public and private organisations, institutions and resources.

At the local level, farmers need knowledge of innovative agricultural technologies to enable them to cultivate their land without contributing to erosion and other forms of environmental degradation. Aarts and Heinz (2010) argue that due to advances in information and communication technologies, the growing global knowledge pool is becoming easier to access; it is equally true that geographic proximity still matters. Innovation and development studies have shown that processes of knowledge production have become more complex. Consequently only large conglomerates of knowledge producers and users interact intensively with each other and are able to generate the critical mass required for further advancement of new knowledge.

From the perspective of developing countries, the expansion of the body of global knowledge is not following a well-laid out strategic path; as the volume of available knowledge has mushroomed, it has also become highly fragmented. The main challenge has become how to find the right sources of knowledge and to mobilize that knowledge for development. This task is enormously complex, especially for developing countries. In the era of globalisation, knowledge and innovations are no longer based on the discovery of new technologies, but rather on the

ability to exploit new combinations of existing knowledge in specific contexts (Aarts & Heinz, 2010).

In the current globalisation discourses university systems are embraced in societies needing knowledge for transformation. National and international development depends on the societal economic transformation. As a result, the policy induced in higher education contributes substantially to social transformation. Thus higher education policies should balance local and global transformation in the current global knowledge convergences. Forces of globalisation are making comparative advantages of convergences in societal democracy, liberalisation of market, competition and choices (King, 2004). Social transformation is an extension of modernity with an essence of knowledge gained which is directly linked with universities, as universities are knowledge producers.

Global universities bring global knowledge to their local situations for societal transformation. It means that universities are players of local and global knowledge marketing exchange (Kogan, 1992). Universities as knowledge producers, research and innovation are other dimension of social transformation in fostering global knowledge convergences. Global and local knowledge transformations seem to be the base for emerging information society that promotes global knowledge based economy (King, 2004). Thus, it needs reliable policy development for research and innovation of universities for appropriate functioning in transforming society in global knowledge convergences.

1.1.3 Globalisation in Context of Higher Education Policy

The expansion of higher education in the current global arena is associated with economic development and it has a role to play in knowledge competitiveness. The expansion of higher education is linked with nation's human capital which determines the capacity of innovation and competitive knowledge economy of that nation with the rest of the world (Kogan, 1992).

Different literature shows that developing countries are seriously affected by globalisation due to their myriad economic, social and cultural problems. In such a global context, there is no doubt

that the impact of globalisation can affect the education systems of developing countries in general and that of higher education in particular. Having a close look at some problems and challenges facing developing countries will clarify the importance of higher education policy in the age of globalisation (Knight, 2004). It is clear that higher education institutions operate in diverse socio-economic, political and educational contexts. Accordingly, their capacities to tap into global sources of knowledge and to produce high-caliber graduates will develop at different rates and will follow different paths. In such a global context, there is no doubt that higher education systems of developing countries should play a major role in their development by providing quality access to education and training, and engaging on local development priorities. The changes in knowledge and innovation systems from the 'small' to the global level also have implications for the way knowledge producers are trained. In a 'small' world with limited connections to the wider world, knowledge development and innovation tend to be driven by local actors, pursuing local opportunities, addressing local challenges and using the knowledge that is available locally (Aarts & Heinz, 2010). In the global knowledge society, students of higher education institution need to behave as 'self-directed learners'. So students also need to learn how to identify issues and problems that are relevant and meaningful in their area of knowledge and expertise. Student of higher education must learn how to analyze issues, to identify what knowledge they need and how to find it. The changes in the global knowledge and innovation system have far-reaching consequences for the world of research (Salmi, 2009).

Stiglitz (1999:23) summarizes this process in a catchy phrase: "Scan globally, reinvent locally". Researchers need to learn how to participate effectively in and use such networks otherwise they will end up on the wrong side of the global knowledge divide. Therefore, policy makers should redesign the curricula of higher education in response to globalization. The implication for developing countries is that, in order to achieve successful development in the age of globalisation, they have to be brave enough to develop and implement education policies that deal with the global discourses and issues. The relationship between education and implementing education policies will help them to develop a nation that has the strength to integrate with the globe and make a positive impact (Lam, 2010).

Another necessary change in the current academic paradigm is the need to tap into global knowledge by creating regional networks and communities of practice, poles of excellence and partnerships between institutions. Moreover, higher education and research institutions need to undertake managerial and financing reform to reinforce their autonomy and their competitiveness (World Bank, 2008). Higher education institutions must do more than simply educate and research; they must provide opportunities for lifelong learning and contribute to the development of knowledge-intensive jobs which will enable graduates to find local employment and remain in their communities. Otherwise the realization of globalisation without local development in developing countries persists forever.

The OECD (2008) and Teshome (2003) explore the policy measures and institutional reforms that can help higher education institutions live up to these challenges. It considers regional engagement of higher education in several dimensions, notably: knowledge creation through research and technology transfer; knowledge transfer through education and human resources development; and cultural and community development, which can create the conditions in which innovation thrives.

In order to assist the socio-economic transformation of society, universities must be transformed in terms of changes in curriculum, quality and standards; program diversification; changes in access policies, student profiles and experiences; and academic responses to local needs (Brennan, King & Lebeau, 2004). Because of the pressure from local needs and global discourses, higher education should adjust itself to address the needs of both local and global social demands by transforming curricula, quality and standards within current global perspectives. Thus, when political and socio-economic transformation is realised, the move towards a knowledge society will be fostered, which in turn speeds up the development of the local and global knowledge economy (Kwiek, 2001). Brennan et al (2004) identify the transformative roles which universities may play in the era of globalization: economic transformation, generation of human capital, socialization of political and social elites and production and dissemination of ideas. Therefore, universities in the current arena are expected to assist profound economic, social and political transformation. Moreover, the World Bank (2002: 117) identified the four major roles of global universities in social transformation: unlocking

potential at all levels of societies, capacity to generate new knowledge, development of a pool of highly trained manpower and capacity to access existing stores of global knowledge and adapting them for local use. According to the World Bank (2002), universities should foster social transformation. In sum, higher education policy needs to be pragmatic and flexible to help build a qualified labor force able to adapt to changing demands in both the local and global knowledge economy.

1.2 STATEMENT OF THE PROBLEM

The government of Ethiopia has been engaged in a highly ambitious and aggressive expansion policy of higher education to re-align its higher education system in order to contribute more directly to its national strategy for economic growth and poverty reduction for the last twenty years. As the result of an aggressive expansion policy, the country's public universities increased from two to 32 universities and enrollment increased from 35 000 in 1996 to 534 978 in 2014 with a total of academic staff of 22 201 engaged in teaching-learning and research in public universities of Ethiopia (MoE, 2014).

In addition to expansion, programme diversification and graduate mix policy introduced in 2009 by the Ministry of Education stipulates that all universities should modify their curricula so that 70% of student intake is in the science-engineering and technology disciplines and 30% is in the arts and humanities. The implication of graduate mix policy is that there will be approximately 375 000 graduates within every five years with about 20% increment in science-engineering and technology streams. However, the policy viability is not clearly articulated for science and technology graduates who should meet the needs of local and global market (Ashcroft, 2011).

Aggressive expansion of higher education in Ethiopia is challenged by the need to serve a total population of about 90 million people, according to 2012 projection, of which 83% are rural. The labor force estimated that of 47 million persons in different development sectors, 80% of the population are engaged in agriculture, much of which is subsistence agriculture (MOFED, 2011). The country's economic growth strategy is based on agriculture-led development that emphasizes technology transfers, improving agricultural production and rural extension, irrigation

development and fertilizer supply and enhancing overall labor productivity through better education, research and innovation (MOE, 2010). On the other hand, because of the global knowledge economy and market competitiveness, educated manpower with globalised knowledge for local and global development is in demand to foster sustainable, rapid and equitable economic growth. These illustrate the breadth and ambition of the Ethiopian government's current higher education reform, which suggests strengthening national capacities and improving the linkages between the labor force demands of an emerging global knowledge economy and instructional programs offered at the universities. Even though the Ethiopian government gives higher education a central position in its strategy for social and economic development, its policy dimension from global knowledge economy and market demand has not yet been critically analysed.

From the globalisation perspective success can only be achieved through a highly-skilled, motivated, global minded and competitive workforce. Therefore, the borderless knowledge economy can only be realized when education policy in general and of higher education in particular prepare students for the local and global marketplace. The aggressive expansion of Ethiopian universities are not producing enough graduates to meet the needs of the local market economy, while still the local market economy suffers from a lack of high caliber graduate in fields of technology (Mulu, 2012). On the other hand the expansion and program diversification of Ethiopian higher education is aimed at socio-economic transformation. However, the linkage of universities with societal transformation is loosely linked with society. This suggests that Ethiopian universities' policy responsiveness to local engagement is problematic.

Some scholars and researchers have attempted to put the future directions of Ethiopian higher education prospects into perspective. Research papers produced so far (Mulu, 2012, Ashcroft, 2011; Belay, 2006; Teshome, 2003) illustrate that quantitative expansion has taken place at expense of quality and social justice. The responsiveness of institutional policies of Ethiopian universities need to be investigated to ascertain if they are aligned to the local and global knowledge market, research and innovation and harmonization of institutional policy in the light of globalization perspectives. Furthermore, Ethiopian higher education institution policy aimed at

producing knowledge for development should be revisited. Therefore, the study is expected to fill the gap observed and suggest a new policy direction for Ethiopian higher education institutions.

1.3 RESEARCH QUESTIONS

In the light of the statement of the problem, the main research question of the study is stated as:
To what extent have universities in Ethiopia responded to the demands and realities of the local and global knowledge economy?

Based on the above main research question the following sub-questions are raised to delimit the area of the study:

- To what extent have universities in Ethiopia embraced the reality of globalisation?
- What is the responsiveness of university policies on teaching and learning, research and innovation, and Information Communication and Technology (ICT) policies to the demands of the global knowledge economy?
- What role do higher education policies play in the socio-economic transformation of Ethiopia and in meeting the demands made by global knowledge economy?

1.4 AIM AND OBJECTIVES OF THE STUDY

The main aim of the study is to investigate the extent to which universities in Ethiopia have responded to the demands of the local and global knowledge economy.

The main aim can be subdivided into the following objectives:

- to analyse the extent universities in Ethiopia embraced the reality of globalisation; to analyse the responsiveness of policies on teaching and learning; research and innovation, and ICT policies on the demand of global knowledge economy;
- to explore the extent of Ethiopian universities policies harmonization in socio-economic transformation and development perspectives

- to explore roles that higher education policies can play in the socio-economic transformation of Ethiopia, while being challenged to meet the demands made by global knowledge economy;
- to develop literature and models for Ethiopian higher education with the global demand of knowledge economy.

1.5 SIGNIFICANCE AND SCOPE OF THE STUDY

Much research deals with globalisation and its impact on the market economy and its political influence on nation states. However, the impact of globalisation in relation to higher education policy is not as well researched. In particular, literature on the global influence on developing countries such as African countries in general and of Ethiopia in particular is lacking. Many authors focus on the globalisation and internationalisation debate according to the theories of neoliberalism, socialism and communism in developed nations. In recent decades researchers in higher education policy have given attention to the impact of globalisation on higher education. In the light of the state of the current research, the researcher aims to contribute to the debate by providing a comprehensive review of Ethiopian higher education development, policies and practices in the past two decades including policy responsiveness to current global knowledge convergences. Thus, the study will provide a basis for future investigations of Ethiopian higher education policy from globalisation perspectives. Furthermore, the empirical data and theoretical concepts add to the current knowledge base of Ethiopian higher education in response to local and global knowledge demands.

Policy as “statement of intent” (Cloete & Wissink, 2000: 3) specifies the basic principles to evaluate an explicit and deliberate governmental intervention. Wilson (2006:153) defines policy analysis as “the process by governments translate their political vision into programs and actions to deliver outcomes desired changes in the real-world”. Policy analysis can be contextualised depending up on the nature of the discipline, such as education, law, public administration, political and international relation disciplines. Specifically, for the purposes of this study the policy responsiveness of Ethiopian higher education is investigated in terms of the impact of internationalisation and globalisation. The findings of this study will stimulate similar research

on Ethiopian higher education from global policy perspectives, assist policy makers to revisit Ethiopian higher education from the current global knowledge convergence and add to higher education literature in the light of globalisation.

1.6 METHODOLOGICAL ORIENTATION OF THE STUDY

1.6.1 Approach

The research methodology design in any study depends on the nature of the research problem and its particular discipline (Creswell, 2003; Maxwell, 2005). The choice of methodology employed was influenced by the literature review, problem formulation on globalization and its impact on higher education institution and the application of international trends in the context of Ethiopia. A literature study assisted the researcher to identify the knowledge gap observed in the area and demarcation of the scope of the study. These perspectives and the nature of the study led to the adoption of a mixed method approach in which both quantitative and qualitative research instruments were employed for their appropriateness to obtain a broad description of Ethiopian higher education.

1.6.2 Sample Selection and Rationale

Six established public universities from 32 universities were selected purposively based on their lengthy experience in teaching and research (20-60 years). These institutions offer a variety of training programmes from undergraduate to postgraduate studies with diversified disciplines and qualified staff and serve other university clusters. Purposive sampling was then used to choose an appropriate sample from these institutions to investigate the issue under study (Best & Kahn, 2008). Participants comprised academic and research officers, research scholars, lecturers with the qualification of Masters (second degree) and PhD (third degree), lecturers, assistants, associate professors and postgraduate students.

1.6.3 Instruments and Data Collection Procedure

Structured questionnaires were employed for quantitative data collection with support of open-ended questions. Focus group discussions and document analysis were used to collect qualitative data. The data collection was conducted in two phases. In the first phase the researcher made preliminary investigation on selected universities to search for documents that support qualitative data generation. The first phase of data collection helped the researcher to generate background information about the six institutions under investigation.

The second phase of data collection was the empirical investigation of the study. The process of data collection for this empirical investigation was extensive: drawing on multiple sources of data from questionnaires, focus group discussions and additional document analysis and triangulation from multiple sites of data sources (Creswell, 2003).

1.6.4 Methods of Data Analysis

The data collected in two phases was categorized on the bases of research questions. Careful and systematic analysis of themes and factors from the phenomenon under investigation was made. The first step was the analysis of conceptual understanding and institutional application of globalisation. The second step entailed the analyses of survey questionnaires and focus group discussions by embedding qualitative within the quantitative data (Creswell, 2003) on the basis of specific sub-questions within central issues of higher education policies and practices.

The data was analyzed as follows:

- Descriptive statistics (percentages and mean values) were employed to show participants' background per institution, qualifications and summary of data collected according to the questionnaire's sub-sections.
- One-Way Analysis of Variance (ANOVA) was employed to analyse the significance differences between various groups (i.e. between the selected universities and respondents).

- Non-parametric test (chi-square test) was employed to analyse nominal data.
- Correlation matrix was employed to analyse policy, the current programme mix and policy effectiveness.

In the qualitative data analysis, coding, triangulation and peer de-briefing techniques were employed. Ethical requirements were met by ensuring anonymity and confidentiality. Maxwell (2005) argues for triangulating the perspectives of different categories on the data as well as seeking for participant validation to integrate participants' perspectives on the data into the final analysis.

1.7 VALIDITY AND RELIABILITY OF THE INSTRUMENT

According to Shenton (2004), it is important to check trustworthiness of the data. Andrews (2007) explains that validity determines whether the research instrument truly measures the intended data and whether its contribution to scientific rationality will be basis for knowledge claims. In order to enhance the validity of the data the researcher sought strong theoretical complementarity and the coherence of convincing arguments with empirical evidence.

To ensure whether the questionnaires were free from vague and unclear items, a pilot study was made. The reliability coefficients of quantitative instruments was determined using Cronbach alpha method of estimating reliability (cf. SPSS 20.0). After the validity and the reliability of instruments were checked, the revised questionnaires were distributed to the respondents of the selected institutions. For qualitative instruments, peer de-briefing techniques, content and face validity were checked based on qualitative data analysis approach (cf. Chapter 4 for full detail).

1.8 ETHICAL ISSUES

The awareness of ethical issues and concerns has grown considerably in conducting research (Hopf, 2004; Christian, 2005). Therefore, in this study research information was kept confidential and the rights and welfare of the participants were protected using the following procedures:

- The participants were informed why and how the research would be conducted;
- All confidential data were secured and recorded by the researcher;
- A consent letters were given to all institutions with description of the aim of the research;
- The researcher kept secure the names or personal description of participants especially for the qualitative approaches.

1.9 DEFINITION AND CLARIFICATION OF TERMS

Globalisation: the opening of local and nationalistic perspectives to a broader outlook of an interconnected and interdependent world with free transfer of knowledge economy and services across national frontiers.

Higher Educational Institutions: Institutions that train highly qualified specialists and scientific and pedagogical personnel for various branches of the economy, science and culture and conduct theoretical and applied scientific research.

Knowledge Economy: An economy in which growth is dependent on knowledge-intensive activities system based on intellectual capital, rather than the means.

1.10 ORGANIZATION OF THE STUDY

The thesis constitutes six chapters organized as follows:

Chapter one is devoted to the introductory part of this thesis which constitutes the background of the study, an overview of globalisation discourse, problem statement, and the research design.

Chapter two deals with the conceptual and theoretical framework of globalisation in general and its impact on higher education in particular. The chapter also refers to different empirical studies of globalization in higher education contexts. The chapter synthesizes the interaction of globalization discourse with higher education policy.

Chapter 3 describes the development and policies and practices of higher education in Ethiopia, the challenges and prospects in the last few decades and the current status of Ethiopian higher education. This chapter also provides the responsiveness of Ethiopian higher education with the current demand of globalization and implementation gaps in the national development strategic plan and its compatibility with institutional policy.

Chapter 4 deals with the research methodology and design, providing scientific justification for all steps and procedure of choosing the research methods, sampling techniques, research instruments, data analysis and ethical issues and ensuring of validity and reliability of the instruments.

Chapter 5 provides the research data presentation, analysis and interpretation.

Chapter 6 is the last chapter of the research report, where the researcher reflects on his view of the research findings. This chapter includes the summary, conclusion and recommendations based on the findings of the study which leads to device institutional policy modeling.

1.11 CONCLUSION

This chapter gave an overview of the background of the study within the main framework of higher education policy, globalisation discourse, the conceptual framework of the study, knowledge economy and higher education policy, the research problem, research aims as well as a preliminary overview of the research methodology, and ethical issues, operational definitions of key terms and preliminary organisation of the study.

The next chapter provides a theoretical orientation to globalisation in general and its impact on higher education in particular.

CHAPTER 2

GLOBALISATION IN THE CONTEXT OF HIGHER EDUCATION POLICY

2.1 INTRODUCTION

This chapter begins with definitions and concepts of the phenomenon of globalisation. It provides a conceptual and theoretical framework for understanding the dynamics of globalisation and its discourses within the context of higher education. The chapter reviews the broad range of interaction between globalisation and internationalisation in higher education contexts and related strategic elements relevant to higher education institutions' policies and practices. It stresses how globalisation impacts higher education systems, their roles and national development in a globalised world. The chapter also reflects globally responsive policies in higher education and the development of knowledge societies from local to global positions.

2.2 THE CONCEPTUAL FRAMEWORK OF GLOBALISATION

Globalisation is an emerging phenomenon of our era and is used by academics, politicians and journalists to explain phenomena across a whole range of social and political domains. Different authors define the concept of globalisation from their unique contexts and perspectives. Globalisation is “multifaceted and encompasses many heterogeneous forces” (Burnett, 2008:18). It is an extremely complex process operating at many different levels and with vastly different resultant effects according to where, why and how it is happening (Burnett, 2008).

Definitions have been appearing since the introduction of global world market discourses under the umbrella of World Trade Organisation (WTO) and the General Agreement on the Trade in Services (GATS) of 1995. In these contexts borderless trade policies for economic classes were clear that the globalisation discourse was bringing the world under one umbrella (Verger, 2010). Burnett (2008: 49) illustrates the different understandings of globalisation as follows:

Globalisation as internationalisation. Here globalisation is viewed 'as simply to describe cross-border relations between countries'. It describes the growth in international exchange and interdependence. With growing flows of trade and

capital investment there is the possibility of moving beyond an inter-national economy, (where 'the principle entities are national economies') to a 'stronger' version - the globalised economy in which, 'distinct national economies are subsumed and rearticulated into the system by international processes and transactions'

Globalisation as liberalisation. *In this broad set of definitions, 'globalisation' refers to 'a process of removing government-imposed restrictions on movements between countries in order to create an "open", "borderless" world economy'. Those who have argued with some success for the abolition of regulatory trade barriers and capital controls have sometimes clothed this in the mantle of 'globalisation'*

Globalisation as universalisation. *In this use, 'global' is used in the sense of being 'worldwide' and 'globalisation' is 'the process of spreading various objects and experiences to people at all corners of the earth.*

Globalisation as Westernisation or modernisation. *Here 'globalisation' is understood as a dynamic, whereby the social structures of modernity (capitalism, rationalism, industrialism, bureaucrats, etc.) are spread the world over, normally destroying pre-existent cultures and local self-determination in the process(Burnett. (2008, p.49).*

From an educational perspective, the concept of globalisation was introduced after WTO/GATS came into operation. Altback and Knight (2006) explain globalisation as follows:

Globalisation is, however, difficult to measure its long-term effect on the course of socio-economic development in various countries. In fact, because of the large disparities in the economic position of the countries inhabiting the globe, it would be imprudent to arrive at any standardised formula of assessing the effects. Globalisation affects each country in a different way due to a

nation's individual history, traditions, culture and priorities (Altbach & Knight, 2007:17).

Furthermore, Altbach, Reisberg and Rumbley (2009) describe globalisation as “a generic term” which can be used in different ways within different contexts:

Globalisation is the flow of technology, economy, knowledge, people, values, ideas across the borders. Globalisation affects each country in a different way due to a nation's individual history, traditions, culture and priorities. To cope with the globalisation, the higher education system has to re-orient its structure and function besides enlarging the scope of its provisions to meet the challenges of globalisation (Altbach,2009, p.57)

On the other hand institutions in any country or nation are a reflection of culture and traditions, although globalisation directly affects institutions, whether educational or otherwise. Even though nations or countries have their own institutional policies and procedures, they cannot escape the influence of global discourses. This why Knight (2003:37) defines globalisation as: “the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education.”

There is still much debate about how to define globalization, identify its consequences and to determine who, if anyone, benefits from it (Rizvi, 2004). Some argue that globalisation is simply the establishment of free markets for products, services and capital via deregulation, decentralisation and privatisation (Green, 2006). Others argue that globalisation derives from the United States' (US) neo-liberal policy agenda and cultural hegemony and its push for political democracy and capitalism. This shows that the emerging global knowledge economy is a driving force of globalisation which encompasses social arrangements in economic, political, and cultural flows of people, products, money and ideas, while at the same time, encouraging these flows to become more massive and intense. It is a process that encompasses more than just economic transformation. According to Evans (2011:21), globalisation is conceptualised as:

...a set of processes by which the world is rapidly being integrated in to one economic space via increased international trade, the internationalisation of production and financial markets, and the internationalisation on a commodity culture promoted by an increasingly networked global telecommunication system.

Beerkens (2003:137) defines globalisation literally: “making or becoming worldwide or all inclusive.” He describes the previous (non-globalised) world in terms of its reliance on economies, cultures, power bases and identities replace by a geographical extension toward the global level. Van der Wende (2004) linked globalisation to higher education systems. According to these authors, higher education systems across the world are changing in response to the challenges and opportunities of internationalisation and globalisation. Beerkens (2003) and Van der Wende (2004) demonstrate that most universities do not differentiate conceptually between internationalisation and globalisation. Van der Wende (2004:10) articulates different points of emphasis in defining the concepts of globalisation and internationalisation:

***Globalisation** emphasises an increasing convergence and interdependence of economies and societies. **Internationalisation** ‘assumes that nation states continue to play a role as the economic, cultural and social systems, becoming more interconnected and activities across their borders are increasing. Co-operation between nation states is expanding and national policies are placing stronger emphasis on regulating or facilitating border-crossing activities.*

Most agree, however, that globalisation is creating significant and pervasive changes along economic, technological, socio-cultural and political dimensions (Coulby & Zumbeta, 2005). The most distinctive characteristic of globalisation is the speed at which changes are taking place, due primarily to continuing technological advancement. These changes are not uni-directional and do not occur evenly in every country, but they have been significant enough to have an impact on the views, beliefs, behavior as well as the material circumstances of people around the world (Stiglitz, 2006). These changes have also led to the creation of a global economy consisting of

numerous networks, connections and associations between nations, societies, organisations and individuals (Coulby & Zambeta, 2005).

For the purposes of this study, the definition of Evans (2011), Van der Wende (2004) and Beerkens (2003) are among the preferred definitions and conceptualisations for globalisation which best portray the impact of globalisation on higher education institutions. Thus, it is not easy to define globalisation according to one dimension. Evans (2011:657) clearly demonstrates the multiple dimensions of globalisation as follows:

Globalisation is not only a process integrating just economy, but culture, technology and governance. At its most fundamental level, globalisation is about the monumental structural changes occurring in the processes of production and distribution in the global economy.

Hence, in the context of higher education and drawing on the definitions of Evans (2011), Van der Wende (2004) and Beerkens (2003), global higher education is seen as ‘the widening, deepening and speeding up of interconnectedness of universities within the global world’. This implies that universities are no longer isolated institutions of society operating in particular towns or cities, but rather global higher education institutions that are connected to the global world, irrespective of their country of origin. This shows that, as economic and cultural globalisation has ushered in a new era in higher education institution, structural adjustments and responsive policy to globalisation are vital to the current arena of globalisation discourse. Higher education institutions are always more “internationally open than most sectors” because of their “immersion in knowledge”, which is not dependent on juridical boundaries (van der Wende, 2007:31). In global knowledge economies, higher education institutions are more important than ever as media for a wide range of cross-border relationships and continuous global flows of people, information, knowledge, technologies, products and financial capital (van der Wende, 2007).

In general, the concept of globalisation is wide in its meaning. Its discourse depends on the type and nature of institutions, systems, actors and norms of the societies it belongs. In all cases the forces of globalisation intersect the economic and political structures in the world through technology, communications and transportation (Knight, 2008). Educational institutions are more susceptible to globalisation as compared to other organisations.

2.3 INTERNATIONALISATION AS RESPONSE TO GLOBALISATION

Scholars debate the differences and similarities in the terms, globalisation and internationalisation. Different scholars use the two terms interchangeably depending on their own fields and schools of thought. However, scholars in an area of economics and education, especially of higher education, conceptualise the two terms differently. Altbach (2006:123) differentiated between the two terms in higher education as follows:

Globalisation typically makes reference to “the broad economic, technological, and scientific trends that directly affect higher education and are largely inevitable in the contemporary world”. Internationalisation, on the other hand, has more to do with the “specific policies and programmes undertaken by governments, academic systems and institutions, and even individual departments to deal with globalisation.

Knight (2003:37) suggests “a give and take” between the terms, globalisation and internationalisation. However, in most cases, internationalisation is more relevant to higher education than globalisation. Literature on the internationalisation of higher education always refers to how higher educations among regions align their curricula with similar academic activities. As a result the objective reality of the distinction between globalisation and internationalisation in higher education is not clear among higher education policy makers. Knight (2003:37) attempted to clarify the distinctions between the two concepts by “the notion of control.” Most literature shows that the level of control for globalisation and its effects are beyond the control of any sector. On the other hand internationalisation needs strategy and reliable policy to control demands arising from societies and institutions (Knight, 2003). With slight differences, most agree that internationalisation is a means of responding to globalisation by integrating international, intercultural curricula in a globalised world (Knight, 2003).

Marmolejo (2012: 53) states internationalizing an institution requires:

- improving student preparedness
- internationalizing the curriculum
- enhancing the international profile of the institution
- strengthening research and knowledge production
- diversifying its faculty and staff.

Thus, in the context of internationalization, two main actions can be identified: “internationalization at home and internationalization abroad.” Knight (2003:11) describes the approaches as:

Internationalisation at home typically consists of strategies and approaches designed to inject an international dimension into the home campus experience-for example, by including global and comparative perspectives in the curriculum or recruiting international students, scholars, and faculty and leveraging their presence on campus.

Internationalisation abroad, on the other hand, calls for an institution to project itself and its stakeholders out in the world. Key examples include sending students to study abroad, setting up a branch campus overseas, or engaging in an inter-institutional partnership.

A variety of other terms are also used: the international dimension, international education, international programming, and international and/or inter-institutional cooperation, international partnerships, cross-border education, borderless education, and regionalization (Altbach, 2009: 24) These varieties of terminologies employed under different circumstances are distinctive approaches to internationalisation undertaken by different higher education systems and institutions around the world (Altbach, 2009). In particular, internationalisation of higher education is multidimensional and remains controversial.

The OECD (2009:28) study report on European academic linking programmes describes internationalisation of higher education as follows:

The internationalisation of higher education is notable for the multiple ways in which it has manifested itself around the world. Although each local, national, and regional context presents unique characteristics, several broad trends can be identified globally". These developments include "mobility of people, programs, and institutions; the rising prominence of collaborative research; evolving curricula as well as approaches to teaching and learning; an increasingly heightened sense of the interconnectedness of the higher education enterprise across the globe; and the growing pervasiveness of the phenomenon of internationalisation across institutions and broader systems of higher education.

In this regard internationalisation of higher education comprises similar specific activities of higher education based on mutual understanding which encourages common policies and programmes. Therefore, universities as open institutions in the global arena can respond to the discourse of globalisation through responsive policies and programmes specifically in teaching and research. The demands of the global knowledge society have placed pressure on higher education to focus more on particular kinds of activities, approaches and outcomes. Research production in higher education institutions plays a vital role in national development agendas and adds to the prestige of those institutions; thus, it has become a very high priority for many universities around the world (Altbach, et al, 2009).

The impact of globalisation is contextual and dissimilar across institutions or sectors and enterprises and the level of its effects also differ based on the scope of that institution or sector. At the institutional level, in the case of higher education institution, the universities, internationalisation can be perceived by the way that large numbers of universities have adopted similar policies and programmes beyond local and national boundaries and aim to produce global citizens with "global competencies" (UNESCO, 2009: 29).

The impact of internationalisation has also been evidenced at both regional and international levels. For instance, the Bologna Process and Lisbon Strategy in Europe are the best examples of international engagement drawing more than 40 countries into European higher education. The Bologna Follow-up Group (1999:17) clearly depicts the target of the Bologna process as follows:

Through the Bologna process it is hoped that the European Higher Education Area (EHEA) will achieve a common, Europe-wide framework of understanding around tertiary education and lifelong learning, with significant cross-border intelligibility of degrees and qualifications, and a high level of quality, attractiveness, and competitiveness on a global scale.

The Bologna Process and Lisbon strategy in Europe are part and parcel of internationalisation and encompass common elements of teaching and learning. The Bologna Declaration (1999:14) declares areas of harmonisation as:

The harmonisation of curricula and institutional reforms, interdisciplinary, mobility and academic exchange (intraregional mobility of students, researchers and teachers), the implementation of joint agendas for the generation of research with social relevance and priority in the framework of the training needs of human resources at the highest level of scientific and technological innovation, dissemination of knowledge and culture, and offering an increasing range of services to government and productive sectors of our nations.

In contrast, globalisation refers primarily to the processes of increasing interdependence and ultimately, convergence of economies and to the liberalisation of trade and markets. Globalisation in higher education is demonstrated by border-crossing teaching-learning in blurred national systems, which depict world-wide trends and growing “global competition” (Teichler, 2007:260). It is one of the main forces driving the internationalisation of higher education (Van der Wende, 2007) and has a strong cultural component, which tends to encourage the

establishment of a global-brand culture, although in principle it can also support the diffusion more indigenous traditions (Teichler, 2007).

The basic distinction between internationalisation and globalisation is well illustrated by Van der Wende (2007:10), who states that internationalisation of higher education is a strategy to make higher education “responsive to the challenges of globalization.” Scott (2005) argues that internationalisation implies “many nations” and globalisation implies “one world” (Scott, 2005). According to Van der Wende (2004), globalisation and regionalisation tend to be regarded as dominant factors contributing to a certain “de-nationalisation” that affects important sectors in society. On the other hand, one can also make a persuasive case that regionalisation in higher education is part and parcel of the globalisation process, establishing co-operation among neighbors in order to counteract the pressure from other parts of the world (Yang, 2002). Moreover Yang (2002:7) remarks:

Globalisation does not have to be uniform process and is not necessarily leading to uniform outcomes. The economic and political power of a country, its size and geographic location, its dominant culture, the quality and typical features of its higher education system, and previous internationalisation policies have all to taken in to consideration.

De Wit (2002:33) explains that globalisation can be thought of as the catalyst while internationalisation is the response. It is typically at the institutional level that the actual practice of internationalisation occurs in the form of internationally-focused policies, programmes, and/or activities (Knight, 2004). As knowledge becomes more internationalised, for example, universities find it necessary to be internationalised in terms of not only their curriculum but also their faculty, students and researchers (Coulby, 2005). National governments are also increasingly realising and promoting the value of internationalising higher education as an instrument for response to globalisation (Van der Wende, 2001). Moreover De Wit (2002: 33) describes four common rationales for internationalising higher education:

- i. **The political rationale** which relates to a nation's "position and role" in the world, including nation building, and foreign policy
- ii. **The academic rationale** which relates to providing an international dimension in higher education, including scholarly exchanges, internationalising curriculum, and attainment of standards of international excellence in research
- iii. **The cultural and social rationale** which relates to the exporting of national culture through promoting the teaching of cross-cultural understanding between nations or communities through such activities as study abroad programmes
- iv. **The economic rationale** which relates to the economic or trade issues/aims of a nation or institutions as a result of internationalization, such as the recruitment of international students to increase institutional revenue.

These are not always the sole rationales for internationalisation, rather there are often multiple rationales at any one time which may differ in importance during different periods of national history and development (de Wit, 2002; Yang, 2002; Knight, 2004). In other words, rationales for internationalising higher education have changed and continue to change over time together with the needs of societies and their economies and of education itself (Yang, 2002). Globalisation and internationalisation in higher education are "potentially conflicting", while at the same time, "interactive and mutually generative" (Marginson & Van der Wende, 2009: 24). Broadly speaking, internationalisation deals with few elements of interaction, whereas globalization is a dynamic process interlocking the local, national and global dimensions more closely together (Marginson & Rhoades, 2002).

Globalisation is more obviously transformative than internationalisation. Globalisation goes directly to the communication hubs and to the economic, cultural and political core of nations, remaking the heartlands where national and local identities are formed and reproduced, while also refashioning the larger higher education environment across and between the nations (Marginson & Rhoades, 2002). Globalisation is the phenomenon that is demonstrated by

recruiting students, faculty and staff from around the globe; exchanges for students, faculty and staff with partners across the globe; global themes in the curriculum; off-shore campus developments; collaborative research and other projects involving partners across the globe (Beerens, 2004). Globalisation is one of the main forces driving the internationalisation of higher education (Van der Wende, 2007).

Today, when making higher education policy, the integration of elements of internationalisation must be considered in response to globalization; market demand urges institutions to become more effective in response to the global challenge (Van der Wende, 2007). Thus, higher education institutions must have a responsive agenda through the medium of internationalisation, designing policy which recognizes how higher education interacts with regional as well as global developments.

2.4 TRENDS OF GLOBALISATION

Globalisation is multidimensional and its discourses include economic, technological and political trends.

2.4.1 Economic Trends of Globalisation

Most scholars show that the economy is a driving force in fostering the fate of any nation in this world. Globalisation as a key reality in the 21st century is shaped by an integrated world economy and the emergence of an international knowledge network (Gunn, 2005). The economy is the core for the emergence of newly industrialised nations and the growth of new forms of dependency in the developing world, resulting in new opportunities with a relocation of production (Coulby & Gunn, 2005).

Neo-liberal economic theory, seen as the driving force behind globalisation, promotes the concepts of new public management and open markets that support the free flow of commodities and capital around the world. Introduced in the 1980s, the aim of the new public management was to promote better management of the public budget through a market orientation which

would, in turn, make public bodies more accountable, effective, and cost-efficient (Olssen, 2006; Gunn, 2005). This theory, the driving force behind globalization, promotes the concepts of new public management and open markets that support the free flow of commodities and capital around the world (Olssen, 2006; Gunn, 2005). This results in, for better or worse, greater privatization of services, such as higher education, once provided and funded by the state in many countries (Olssen, 2006 & Gunn, 2005).

Formerly goods traded across national boundaries, but the current state of globalisation has changed the nature of trading to embrace the commodification of all types of human enterprise (Gunn, 2005). The quantity and speed with which these commodities, including capital, labor and information, are moved across national borders is continually increasing. Information, or knowledge, is now one of the most valuable and important commodities traded in the globalised economy (Coulby, 2005). Globalisation causes the emphasis in trade, mainly among developed nations, to move from the manufacture of products to the provision and consumption of services, including education services. A nation's ability to be economically competitive and relevant in the global market is highly dependent on being able to produce specialised products and services for consumers, making research and development crucial (Coulby & Zambeta, 2005).

2.4.2 Technological Trends of Globalisation

The continuing advances and spread of new developments in science and technology, linked mainly to international communication, transportation and the sharing of and access to information, are among the major drivers of globalisation (Coulby and Zambeta, 2005). As globalisation demands a network driven by technological innovations, it is important to devise the restructuring of the world economic system through post-industrial knowledge (Gunn, 2005).

In recent years, the development of information communication technologies has resulted in the rapid and unprecedented sharing of knowledge and helped create extensive global networks in all areas of life (Marginson, 2002; Olssen, 2006). Technological innovations have also changed the skill requirements needed in the labor market leading to increased demand for more highly educated workers. ICTs are now vital to many work functions (Olssen, 2006).

Culture is also one of the ways in which people most directly experience globalisation. Cultural values and norms are transmitted via such globally marketed products as films, books, magazines, television, media, newspapers, electronic games and food (Coulby & Zambeta, 2005). The scale of cultural transmission and global products also perpetuates the idea of a global culture that cuts across national boundaries (Yang, 2002; Olssen, 2006; Rizvi, 2004)).

2.4.3 Political Trends of Globalisation

Political globalisation is a powerful dimension of globalisation that influences, and is a consequence of, the other dimensions (Olssen, 2006). Although nation-states remain the main medium of political control, key to the notion of neo-liberalism is the belief that national boundaries create a significant obstacle to the development of free trade and flow of capital (Rizvi, 2004). Green (2006) and Rizvi (2004) argue that, despite this new world order, national governments still play a significant role in relation to work, welfare, education, immigration, national security and defense.

Moreover, Green (2006) elaborates that in the current phase of globalisation, national governments continue to have some control over their higher education systems. Knight (2007) and Altbach (2009) similarly contend that while globalisation has an overall tendency to reduce the traditional national character of higher education institutions and differences between national systems, it still has to contend somewhat with the influence of national policy structures which shape education. Green (2006), on the other hand, assert that some of the power once held by nations in regard to educational policy and governance is being taken over by market forces and multilateral agreements, with regulation and financial support remaining the only elements over which the state still has some authority.

In the early 21st century, the view of higher education has changed from one of a private good which primarily benefits individuals rather than nations as a whole. This implies these institutions should be responsible for generating a large portion of their own revenue, and students should be responsible for paying most of the costs related to their education (Knight, 2007; Altbach, 2009). In many countries, particularly those which have traditionally offered free public higher

education, this view remains quite controversial and even the introduction of nominal tuition fees has sometimes been vigorously protested (Altbach, 2006). These forces of globalization shape national policies and programmes in which universities are embedded. Although modern higher education institutions are product of national policies and are fully integrated in national educational systems, it is difficult to escape from trends of global discourses.

2.5 COMPONENTS OF GLOBALISATION IN HIGHER EDUCATION

It has been illustrated that globalisation is a wide ranging attempt to universalize policies and practices under one umbrella (Scott, 2005). Globalisation in higher education institutions involves many activities including academic and student mobility with borderless, cross-border, transnational and off-shore activities (Knight, 2007).

There is a need for a common understanding of the terms used, and without reliable data, it is a challenge to develop sound policy and regulations to guide higher education institutions and to monitor new opportunities, risks and benefits (Knight, 2007). According to Knight (2007:38), the main conditions necessary for globalisation in higher education institutions include:

- Economic interconnectedness among nations: international labor market
- Emergence of the digital age including autonomous space for free enquiry and multiplication of nerve endings for research
- Emergence of consumerism in public and private sectors and related features of choice, product, price, quality and rights
- Democratization of the world order: weakening of nation state, region to region connections
- International political agendas with implications for higher education institutions
- The knowledge industry and its manifestations
- Survival – innovation – competition mode 2
- Dynamic competition compared to static competition
- Weakening of the notion of national higher education institutions systems.

Douglass (2005:63) cites some interconnected factors that globalists use as determiners of the paradigm shift to a globalised higher education institutions market:

- Changing recruitment markets for students and faculty
- International collaborations between universities and with business
- Trend toward organisational convergence
- Computer technologies opening new markets
- Repositioning of existing institutions into new markets and mergers
- International frameworks related to education such as Bologna and the GATS.

These factors combine to produce major problems for the traditional sector of universities that will be forced to revisit policies and practices of higher education institutions (Douglass, 2005).

Whilst globalisation remains a potent force in higher education institutions, strong countervailing local forces are at play (Douglass, 2005). Contemporary governments are often driven by an economic agenda in creating higher education institutions policy. Universities are required to respond to government policy and, in the context of globalization, this could lead either to cooperation or to competition, which are often considered opposing rationales. In order for universities to deliver effective responses to the opportunities presented by globalization, they need to ensure that they have appropriate structures and systems in response to global demands and developments (de Wit, 2002).

These global components demonstrate the conditions necessary for globalisation in higher education and the factors used to determine the extent of globalisation within higher education. Higher education responses to globalisation have significant impact on higher education activities and there are several similarities in government responses across countries. Douglass (2005) argues that whilst globalisation remains a potent force in higher education, strong countervailing local institutional forces shape their international activities.

2.6 THE IMPACT OF GLOBALISATION ON HIGHER EDUCATION POLICY

The issues of globalisation in the current arena are debated by scholars in different disciplines from different perspectives as a merit and demerit, opportunity or threat or risk and/or challenge. Marginson and van der Wende (2009:18) clearly depict the impact of globalisation as follows:

Now the growing impact of the global environment is inescapable. In many nations international mobility, global comparison, bench-marking and ranking, and the internationalisation of institutions and systems are key policy themes, and governments and university leaders are preoccupied by strategies of cross-border co-operation and competition.

The impact of globalisation on higher education offers exciting new opportunities for study and research unlimited by national boundaries, joint degree programmes, ‘twinning’ efforts, and other approaches to cross-border education (Tefera, 2008: 30) which is seen as an opportunity to have a positive influence on the volume, quality and spread of knowledge through increased interaction among the various states.

According to Verger (2010:49) the global impact on education policy is clearly described in different mechanisms as follows:

- **Imposition:** external actors compel some countries to take on particular education policies (the classic example being the conditionality to credit of the World Bank, the IMF and other aid agencies to borrower countries).
- **Harmonization:** a set of countries mutually agree on the implementation of common policies in a certain policy area (e.g. the configuration of the European Space for Higher Education).
- **Dissemination:** external agents use persuasion and its technical knowledge to convince countries on the implementation of certain policies (e.g. through annual reports, best practices data-bases and technical assistance).

- Standardization: the international community defines and promotes the adherence to a set of policy principles and standards that frame the countries' behavior (e.g. international performance tests, such as standardization of curricular content at the global level).
- Installing interdependence occurs when countries agree to achieve common objectives to tackle problems that require international cooperation.

Globalisation rearranges the geographical dimensions of nation-states and societies and make them interdependent in an unprecedented manner and pace (Dale, 2005). Verger (2010) argues that globalisation is demanding global citizens with an awareness of the political, economic, social and environmental concerns of our globe. Furthermore, Dale (2005) highlighted that in a globalised world, individuals are able to have direct and immediate influence on economic and political systems.

A profound outcome of globalisation is to prepare students for a labor market that is beyond national geographic boundaries (Tefera and Knight, 2008). In order to produce global citizenship, higher education is expected to revisit and integrate international components into their curriculum to meet students' expectations for developing global competencies so that they can be successful in a world society sustaining economic competitiveness in an increasingly global marketplace with common trans-border interests (Altbach, Reisberg & Rumbley, 2009). These diverse demands on higher education internationally are challenging the ability of higher education institutions to prepare global citizens.

However, Tefera and Knight (2008) observe that internationalising higher education to keep pace with both economic and academic globalisation presents many challenges at institutional and policy levels. Furthermore Altbach's (2007: 7) argues with Tefera's (2009) in that the most disconcerting characteristic of globalised higher education is that "existing inequalities are reinforced while new barriers are erected" which aptly describes a world in which the influence of northern knowledge and scientific and scholarly agendas dominate (Altbach, 2007). This clearly demonstrates that the notion of globalisation becomes a challenge for developing

countries in Africa in comparison with advanced higher education in developed countries (Tefera, & Knight,2008)

Certain researchers see globalisation as a risk (Knight, 2006). Knight (2006:63 sees the “commercialisation of higher education, "foreign degree mills" and "brain drain" as key risks of internationalisation. Knight (2006:65) declares that cross-border education specifically presents particular kinds of threats:

Non-sustainable foreign provision of higher education, foreign qualifications not recognised by domestic employers or education institutions; because of the imposition made by elite who can afford cross-border education; national higher education policy objectives not being met.

Even though the risk assessment varies from region to region based on the relative strength and standing of specific higher education institutions, research suggests that the overall perception of risk associated with internationalisation of higher education is higher in the developing world (Knight, 2006). African higher education is the most challenged institution compared to developed countries due to the ‘borderless’ higher education market in which higher education in developed countries promote their services in Africa (Oyewole, 2010: 19-30). As higher education is mandated with the production of competent citizen, it operates in an open system (Oyewole, 2010) and educational institutions are tremendously and constantly influenced by their external environment. Currently the knowledge society, increased labor mobility worldwide, greater promotion of the market economy, trade liberalization and decreased public funding for education dominate (Knight 2008). The interdependence of higher education with globalisation profoundly impacts higher education institutions (Altbach et al, 2009). For instance, according to Altbach et al (2009:79), the forces of globalisation influence nation-state decision making through the following:

“the General Agreement on Trade in Services; North American Free Trade Agreement; and, of interactions between international organisations (the World Bank; the International Monetary Fund; the Organisation for Economic

Cooperation and Development; and, the United Nations Educational, Scientific, and Cultural Organisation, intergovernmental organisations (the European Union, African Union, Asia Pacific Economic Council, and Caribbean Community and Common Market.”

These forces develop global laws and agreements on transnational trade and higher education as a free trade service and educational opportunities (Altbach, 2009; Spring, 2005). The impact of globalisation on institutions and nation state practices make many states step back from direct control of higher education (Ordorika, 2006). It results in a state supervisory model which leads individual nation-states to be competitive in the global knowledge economy. According to UNESCO (2009:10):

Due to globalization and internationalisation processes as well as changes in the nature of Nation-States, initiatives for accountability have been promoted in almost every area of societal life. The emergence of a higher education market poses a significant challenge for national research universities: the need to participate in the global realm of colleges and universities on the basis of their own nature and distinctive character, without diluting these in the face of hegemonic models and dominant international guidelines.

This illustrates the controversial way that globalisation influences the operation of higher education. As the policy of globalisation advocates free market policy with no exception for higher education, it should be competitive enough at both local and global levels in teaching, learning and innovative research activities. Therefore, universities should align themselves with the nature and notion of their polices that lead them to homogenising their productivity, which preserves diversity within a broad commitment to society Ordorika (2006).

The other significant challenge to and debatable issue in higher education is the policy of neoliberal ideology. The policies of the World Bank, the International Monetary Fund (IMF), and the World Trade Organisation (WTO) declare open market principles and free market competition with respect to the introduction of the General Agreement on Trade in Services

(GATS) and its impact on the provision of cross-border higher education (Knight, 2007). Lynn Meek, Teichler and Kearney (2009: 43) argue that “one of the main instruments of globalization and the emergence of the neo-liberal global economy is the creation of the World Trade Organization (WTO) and the launching of the General Agreement on Tariffs and Trade”. Knight (2007:32) elaborates the policy of neoliberal ideology as:

While demand is growing, the capacity of the public sector to satisfy this need is being challenged. As a result, new types of providers such as international companies, for-profit institutions, corporate universities, IT and media companies are emerging. This scenario is changed further with providers of public and private, new and traditional delivering education across national borders to meet the demand in other countries. Alternative types of cross-border programme delivery such as branch campuses, franchise and twinning arrangements are being developed. As a result, a rather complex picture of higher education provision is emerging.

The analysis of the relationship between the GATS and education can be situated in the area of globalisation and education. This is an emerging area of studies that looks at the implications of the processes of globalisation on education policy (Vergier 2010). In the current globalised environment, international actors and educational and extra-educational factors originating at supra-national scales are affecting national education policies, priorities and outcomes. An important part of the educational changes are embedded within interdependent local, national and global political economy complexes (Vergier 2010).

It is obvious that higher education operates in a globally competitive market and governments everywhere are concerned to maximize their higher education institutions' contribution to the knowledge economy through the “world-Class” research university (Ordorika, 2006:5). The connotation means that world-class universities are part and parcel of globalization. Ordorika (2006:5) explains the impact of globalisation on higher education ranking as follows:

Globalisation has added a new element to competition and stratification in higher education. Research universities have always competed with each other for social and academic prestige, and also have long engaged in cross-border activity at their margin. Now for the first time we can identify a single system of world-wide higher education: a network of web-sites joined by instant messaging and data transfer, in which global connections run through the center of institutions and governments and are integral to day-to-day practices. At the same time global people mobility in higher education has substantially increased. In turn global communications and mobility have created conditions for the emergence of a global market in higher education, i.e. competition among elite universities is now worldwide and is moving closer to capitalist economic forms.

As clearly demonstrated by Knight (2007) and Ordorika (2006), the neoliberal policy ideology practices and global competition equally impact and challenge the operation of contemporary higher education in a multi-dimensional way. Global challenge and competition is forcing higher education to innovate local practice (Marmolejo & Puunka, 2006). Marmolejo and Puunka (2006:11-12) further stipulate:

If countries want to be globally competitive, regional innovation systems need to be strengthened. In order to achieve this, cooperation between higher education institutions becomes vital. Currently, many regions are characterized by an abundance of activity involving higher education in regional development in some way, but there is limited evidence of coherent action in regional engagement, academic excellence, and research activities.

This demonstrates that globalisation has a tremendous impact on the operations of higher education institutions; it reshapes cultures and the diversity debate and forces the immediate need for curricular and support services change at institutions of higher education. The tremendous impact of globalisation is articulated by Aarts and Greijn (2010:9) when they say:

The process of globalisation is changing the ways in which knowledge is produced, applied and disseminated. Universities, the most important institutions in the organisation of research and higher education, need to rethink their roles and functions, and develop their capacities to anticipate and respond to these challenges.

Globalisation linked to economic and technological factors and ranging from transnational and regional agreements to institutional enterprises stimulates responses from higher education institutions. Altbach and Knight (2007:71) note that internationalisation is comprised of policies and practices undertaken by educational institutions to cope with the global academic environment to proactively and strategically develop competencies that allow them to convert the pressures of globalisation into opportunities to build institutional capacity. Burnet (2008) depicts the impact of globalisation on higher education across the globe as crossing borders (import and export), international competition and the need for enhanced quality assurance. Crossing borders (import and export) implies liberalised trade in education and the issues vary substantially with country, mode of delivery and sector of education. It is difficult to draw a definitive conclusion on whether trade in education is a 'good' or 'bad' thing (Burnett, 2008:30). Borderless education causes an increase in competition between higher education institutions, which strive for economic sustainability, social prestige and income-earning in a finite market (Burnett, 2008). Further, increasing cross-border practices creates a need for attention to quality assurance and accreditation of cross-border education programmes and providers. National quality assurance schemes are challenged by the complexities of the international education environment.

Thus, policies on quality assurance are becoming important areas in working out the tensions between different values and interests and harmonising trends of quality assurance policies in higher education. Global quality assurance practices are heterogeneous in their approaches and the instruments required to measure the quality of particular institutions. Where cross-border education expansion is exacerbated, there is a need for standardized quality assurance at local and global levels in the hands of bodies related to the education sector (van der Wende, 2005; Knight, 2004). Thus, quality assurance in higher education is the top of the policy agenda in many nations (OECD, 2004). Within this global discourse, higher education quality assurance policy is a

concern of all institutions in order to evaluate the quality of institutions and programmes since one cannot guarantee and validate the quality of a domestic higher education system in its own right. Cross-border education services, joint degree programmes and validation of professional qualifications require other forms of quality assurance (OECD, 2004).

Scholars (e.g., Van der Wende, 2005; Knight, 2004) have different conceptual understandings of quality dimensions; as a result different quality assurance practices can be observed in different institutions of higher education. This in turn brings about different competences among institutions. However, Douglass (2005:39) includes the following dimensions of quality that embrace functions and activities of quality educations: teaching and academic programmes, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and the academic environment.

Thus, this global discourse requires the harmonisation of quality assurance policy, standard instruments for quality measurement, accreditation and, benchmarking system and accountability in higher education institutions everywhere (Adelman, 2009). However, the quality assurance policy scheme implementation across the borders is not always compatible. According to OECD (2004) and Van Damme (2004), quality assurance policy incompatibility with the cross-border models for higher education raises new questions with regard to standards of quality in more diverse environments. In order to mitigate this challenge they urge that higher education quality assurance policy should be compatible with global demands (Van Damme, Van der Hijden & Campbell, 2004).

As economies around the world move progressively toward the production of knowledge, or a knowledge economy, trade in knowledge and knowledge-based processes becomes more important and lucrative than the manufacture of material products (Coulby, 2005; Varghese, 2008). According to Green (2006), higher education is critical to national economic development in the knowledge economy for its role in both knowledge production and the training of knowledge workers. Although knowledge is now being produced in a variety of organizations around the world, universities remain very important in the hierarchy of knowledge production (Yang, 2002; Coulby, 2005).

Coulby (2005) contends that while globalisation has an overall tendency to reduce the traditional national character of higher education institutions and differences between national systems, it still has to contend with the influence of national policy structures which shape higher education policy. The relevance of local culture must be taken into account during strategic planning in particular as institutions respond to the opportunities presented by globalisation.

It is clear that the discourse of globalisation is hugely influential and impacts on higher education institution policy (van der Wende, 2005). Therefore, higher education institutions should commit to reform their policies. Marmolejo and Punka (2006), one of the roles of higher education should be its engagement in local development activities for the development of local societies that impact on global market competition. In order to realize equitable global competition, higher education (UNESCO, 2009:97) should develop:

- responsive policy to global discourses
- responsive policy to the world of work
- responsive policy to levels of the education system,
- responsive policy to local development and cultures
- responsive policy to research, quality assurance
- responsive policy to everywhere and all the time.

The global environment in which higher education operates today is wide in its range and faces complex and conflicting interests and interactions. Both local and global demands require careful attention by policy makers to make institutions interactive in the global and local contexts. This is why the socio-economic role of higher education in the global information society is crucial for the development of societies (UNESCO, 2009). Therefore, in order to maintain the balance of globalisation discourses higher education needs responsive policies and strategies to maximize opportunities and benefits of globalisation while ensuring local development as well.

2.7 GLOBALISATION AND KNOWLEDGE SOCIETY

Education is the fundamental driver of the knowledge economy. The concept of the knowledge society has emerged from the impact of the economic and technological forces of globalisation on higher education teaching and research. The economy on the other hand is an engine for competitiveness of nations in this global discourse, while higher education is seen as a promoter of knowledge societies. Consequently, the educational delivery paradigm of higher education has shifted from the exclusive production and dissemination of knowledge to the technological transfer of knowledge in what has been termed, the knowledge society (de Wit, 2002).

The concept of knowledge society is well expressed by Marginson (2007) as a widening, deepening and speeding up of worldwide interconnectedness in the context of globalisation, within the changing environment of higher education. Because of the forces of globalisation, higher education institutions are shaping their mission according to entrepreneurial approaches which steer the discourse regarding the knowledge needed in society (Vaira, 2004). Higher education is obliged to shift its paradigm, in addition to production of innovative knowledge, to respond to the societal good of economic competitiveness and development (Vaira, 2004). More importantly, there is a need to prepare students to be internationally competent so that they can function professionally in more and more culturally diverse settings and be more competitive in international markets (Knight, 2008). Accordingly, higher education institutions are more important than ever before in global knowledge economies (Held, 1999). The rapid gathering, generation, reuse, evaluation and exchange of knowledge is increasingly vital to global economic activities (Olssen, 2006).

According to Coulby (2005:4) the use of the term 'knowledge' now applies to a broad range of information and data sharing characterized as:

- Accessibility and super abundance-an extraordinary amount of information and data can now be found and is easily available at home or work via ICTs;
- Commercialisation- knowledge is increasingly a commodity sold in the global economic marketplace; and

- Internationalisation-knowledge, as it flows around the world, is increasingly subject to various international influences.

As economies around the world move progressively toward the production of knowledge, or a knowledge economy, the trade in knowledge and knowledge-based processes becomes more important and lucrative than the manufacture of material products (Coulby, 2005; Green, 2006).

According to Green (2006), higher education is critical to national economic development in the knowledge economy for its role in both knowledge production and the training of knowledge workers.

Although knowledge is now being produced in a variety of organisations around the world, universities remain very important in the hierarchy of knowledge production (Gibbons, 1998; Yang, 2002; Coulby, 2005). Many breakthroughs and advances in knowledge production and technological development still occur in universities and via teaching and publications, they play a crucial role in disseminating knowledge (Coulby, 2005). The level of specialised knowledge and scale of research required to be competitive in the knowledge economy also requires a great deal of international cooperation in the form of international networks and collaborations in which universities have long been active (OECD, 2004).

The requirements of the knowledge economy dictate not only the type of knowledge considered valuable in the global market but also the type of human capital needed. The development of a pool of well trained and technically-skilled workers who are intellectually independent and innovative is needed for nations to be globally competitive. A well-educated and skilled labor force is essential for creating, sharing, disseminating and using knowledge effectively (Coulby, & Zumbeta, 2005).

The discourse of knowledge society is accelerated by the relationship between knowledge production and higher education transformation. In the knowledge society discourse, higher education institutions are more important than ever as mediums in global knowledge economies (Marginson & Considine, 2000). An illustration of the regional dimension of the knowledge society is the Lisbon strategy in which European nation states are engaged. The UNESCO

(2009:7) report shows the European commission's dedication to the production of knowledge societies and is expressed as follows:

To become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion' and 'new employment possibilities, more fulfilling jobs, new tools for education and training, easier access to public services, increased inclusion of disadvantaged people or regions.

Moreover, Teichler (2007:23) clearly describes 'Europeanization' as "the regional version of internationalisation or globalization". The horizontal mobility and cooperation via the academic mobility network programme and subsequently standardisation of study programmes (Teichler, 2007, p.23) are an indication that the European higher education arena is under one policy umbrella. One can easily understand that the dimension of knowledge societies is both regional and global. Therefore, higher education is seen as an engine in supporting national economic competitiveness in the global marketplace (Teichler, 2007).

Inevitably, issues of globalisation and knowledge societies require responsive policies from higher education for equitable social change and national development. The globalisation discourse directly impacts how higher education institutions produce applied and disseminate knowledge. As a result, higher education should rethink their policies and programmes to anticipate and respond to global challenges (Aarts & Greijn, 2010). Knowledge is a driver of development and the capacity to assimilate knowledge is a key factor (World Bank, 2008) enables the knowledge society to catch up economically, in any form of development, which when defined in "social, human or economic terms, has become critically dependent on knowledge" (Aarts & Greijn, 2010: 9). According to Oyewole (2010) the impact of knowledge for development depends on the following:

- driving competitiveness and productivity;
- facilitating improvements in welfare and environmental stewardship;
- improving nutrition, combating epidemics and protecting against natural disasters;

- encouraging better institutions and governance – it is recognised that there is a clear
- correlation between low educational levels and the occurrence of civil strife or ethnic conflict;
- providing crucial inputs for policy-making processes; and
- reshaping economies.

Today the most advanced countries in the world are the Western countries because of knowledge production, assimilation and dissemination in their societies. This impacts the Third World. Africans, in particular, experience significant disparity in development, dividing the world into two particular regions, the developed and developing world. Knowledge production, assimilation and dissemination by higher education institutions in the Third World is weak and this impacts on Africans who are at high risk of under-development (Greijn & Tefera, 2010). Policy making on knowledge for development is at its infancy stage in developing countries.

Because of the current global discourses encouraging cross boarder education and professional mobility, African higher education institutions are not realizing their academic potential in the local community; assimilation by the developed countries with prestige institutions causes a brain drain (Tefera, 2009). This in turn adversely affects the knowledge production of developing countries and perpetuates the global knowledge imbalance (Mohamedbhi, 2005). This fact is argued by Oyewole (2010:19) as follows:

Knowledge has become the chief currency of the modern age. The ability to generate and exploit knowledge is essential in the creation of wealth. But African countries face considerable challenges in generating, accessing and disseminating knowledge. Higher education has been identified as crucial for social and economic development, in which African countries must invest.

According to the World Bank (2007), African higher education should recognize the need for a significant number of highly educated manpower for the creation of a “versatile knowledge economy” which would in turn play a significant role in the production of global knowledge

societies. In the case of African higher education, a lot is expected from higher education institutions and national governments to balance the global discourse. Singh (2007:132) argues:

In order to respond to the global demand of knowledge societies, African higher education institutions should revisit their policies to interact the emerging knowledge economy in all key core function areas of teaching, research and community engagements, through the development of new curricula and qualifications to address new educational and training needs, through developing appropriate research themes to address new knowledge needs.

Global knowledge production and an innovation system determine the way higher education students need to be trained (Arts & Greijn, 2010). As future knowledge workers, higher education students need to work in a global knowledge society. The challenge is how to universalise higher education in such a way that learning globally contributes to the capacity to address local needs. Therefore, higher education should revisit the way their curricula are designed and their overall policy directions (Arts & Greijn, 2010). The success of higher education in Africa will be determined by the extent to which their graduates are able to tap knowledge from global knowledge networks and apply it effectively to their own contexts in support of local development (World Bank, 2008).

Higher education operates in an open global system populated by different interest groups with different policy ideologies related to globalisation. To reconcile the different interest groups and global and local stakeholders, research is a key element in global and local development endeavors (Marginson & Van der Wende, 2009). Therefore, in order to react to these global imbalances, policy makers should rethink higher education practices - whether or not they relate to global demands - and should narrow the existing knowledge gaps between the developed and developing countries.

2.8 RESEARCH AS A BASIS FOR KNOWLEDGE ECONOMY

The process of globalisation is changing the ways in which knowledge is produced, applied and disseminated (Aarts & Tefera, 2010). Higher education institutions, the most important institutions in the organisation of research, need to rethink their roles and functions and develop their capacities to anticipate and respond to these challenges. The mission of higher education is teaching, research, and community service (Aarts & Tefera, 2010; Altbach, 2009). Research and development have now become a major source of recognition and revenue for universities. These and other global trends present continual challenges and opportunities to higher education.

There is growing recognition that knowledge is the main driver of development. Any form of development, whether defined in social, human or economic terms, has become critically dependent on knowledge. Countries with the capacity to generate and assimilate knowledge and the capability to use it to develop new forms of organisation, products and services are better able to attract investors and to take advantage of new opportunities (Szirmai, 2008). Moreover, this applies not only to industrialised countries, but also to countries whose economies depend on the availability of cheap labor and the production of commodities (World Bank, 2008).

The forces of globalisation driving globalised society is becoming increasingly and critically dependent on knowledge for addressing problems and challenges at all levels. At the global level, knowledge is needed to predict and to mitigate the impacts of climate change and global warming: global rising sea levels, more frequent regional floods in certain areas and changes in agricultural production methods. At the national level, health authorities need to know how to run a functioning health system that provides basic standards of public health and medical care, and ensures the efficient use of public and private organisations, institutions and resources. At the local level, farmers need knowledge of innovative agricultural technologies to enable them to cultivate their land without contributing to erosion and other forms of environmental degradation. While it is true that due to advances in information and communication technologies, the growing global knowledge pool is becoming easier to access, it is equally true that geographic proximity still matters (Tefera & Greijn, 2010).

From the inception of global policy via WTO and the global market economy, research carried out by economists facilitates global and local trade competition and cooperation. Research adds new knowledge and at the same time improves existing knowledge and its application. Therefore, in this global discourse, higher education has a vital role in inventing new knowledge for local development that in turn forms the knowledge society which facilitates regional development, social and economic commitment. Clear higher education policy for teaching and research activity needs critical attention to impact local development. Moreover, in this global arena, higher education should not only provide quality teaching but also relevant research for regional development (Marmolejo & Punka, 2006). The recognition of research in the current global discourse helps to '*position nations in a global knowledge-based economy*' and elevates the importance of higher education institutions (OECD, 1996: 97).

From the perspective of developing countries and in Africa in particular (Aarts & Greijn, 2010) the expansion of the body of global knowledge does not following a well laid out strategic path. Although the volume of available knowledge has mushroomed; it has also become highly fragmented. The main challenge is to find the right sources of knowledge and to mobilize that knowledge for development. This task is enormously complex, especially for developing countries. Policy making on knowledge for development is still in its infancy and in many cases does not go far beyond the common notion that knowledge is good and leads to more development, without providing much in the way of ideas on how this should work in practice (Tefera, 2010).

The global knowledge economy demands the cooperation of higher education, government and industry linkages as described in the Triple Helix theory (Etzkowitz, 2008) for national innovation. Although these changes are expected to support advanced research, they have also encouraged further differentiation between institutions: research-intensive institutions versus teaching institutions and research or teaching-only universities and within them (Teichler, 2007). Institutional research policy development in individual institutions responding to globalization has become a major policy trend worldwide.

In the developing world (Oyewole, 2010), scientific and technological research is largely a state-supported enterprise concentrated in separate government research institutes. As a result of the growth in university research capacity, output has become very limited (Teichler, 2007). The contribution of knowledge production of higher education in developing countries in general and that of Africa in particular is not comparable to that of Europe (Tefera, 2010). This “lopsided global knowledge” (Aarts & Greijn, 2010:10) demands relevant global research for development. The emergence of a global research for development agenda is important for both the developing as well as the developed world (Molenaar, Box & Engelhard, 2009) leading to new research hotspots in emerging economies and developing countries. Soete (2009:22) argues that within this globalisation discourse, more balanced distribution of knowledge “hotspots” across the world is required. The gap between developing countries, in particular in Africa, and the more advanced regions seems to be widening. In order to minimise disparity in the knowledge gap, research and innovation, developing countries need to develop appropriate policies and strategies and international cooperation (Aarts & Greijn, 2010). Higher education in developing countries is different from higher education in industrialised contexts, which need new policy alternatives.

2.9 HIGHER EDUCATION POLICY IN THE GLOBAL KNOWLEDGE ECONOMY

The notion of policy transfer is now widely used in an attempt to understand international dimensions of national policy processes in the current stage of globalisation. The knowledge based global economic policies are currently diffusing through the epistemic communities of higher education and are gaining a strong influence in policies of countries throughout the world. Higher education institutions, like other major social institutions, are undergoing significant transformations in the context of THE intersecting processes of globalisation, technological innovation and changing organisational dynamics. Governments across the globe have adopted policies to promote massive expansion of higher education to foster innovation and increase the supply of knowledge workers required for competitive performance in a globalising economy.

Higher education and research play a key role in the formation of the knowledge economy in response to globalization. Because of today’s globalisation discourse, the system of higher education needs an emerging global model which can accommodate global competition,

collaboration, mobility and cross-cultural encounters (OECD, 2009). As a result of globalisation, higher education systems, policies and institutions need transformation (Marginson & van der Wende, 2009). Knowledge marketisation in higher education is becoming central to worldwide networking and is reshaping social, economic and cultural factors (Marginson & van der Wende, 2009:18).

As a result of the ongoing transformation in knowledge, higher education institutions must be viewed as reflective of the much larger changes in the social structure. This has become even more pressing as the process of globalisation has unleashed a new political economy of knowledge within which different institutions are altering their place and identity. Consequently, within the realm of higher education, universities have come under relentless pressure to change the way in which their business is conducted (Etzkowitz, 2008). Beerkens (2004) identified the economic structure as the core foundation of the capitalist social structure; the increasing dependence of the economy and society on knowledge and information processing has deepened the reach of the economic sphere, necessitating a significant institutional transformation to create more productive institutions (Etzkowitz, 2008). Based on these assumptions, the university is increasingly viewed as the institution capable of taking up, in addition to its traditional roles of knowledge production, preservation, and transmission, the task of socio-economic development and regional innovation. This mandate is derived from the growing awareness that productivity and global competitiveness are based on the constant production, mobilisation and generation of both new and reformulated knowledge (OECD, 2009).

In concert with the movement of knowledge from the shadows to the center of contemporary social and economic activities, universities take on a more prominent role in advancing regional, national and global agendas (OECD, 2009). A growing array of discourses appearing variously in managerial, critical and postmodernist accounts suggests the destabilisation and repositioning of the academy which comprise an academic revolution and has created a third generation of universities led by new paradigms of knowledge production. The new kind of institution is sometimes depicted as the corporate or entrepreneurial university, in the process breaking down boundaries and dismantling or moving beyond the ivory tower (Burnett, 2008)

According to de Wit (2002) a leading proponent of the advancement of knowledge societies, there are potentially serious policy consequences that could follow the growing status and income gaps between a relatively small leading class of knowledge workers and the majority of highly productive workers in other economic sectors. Policies and practices related to innovation and higher education are influenced by numerous variables. Burnett (2008) stresses that along with national and regional variances in relation to economic factors like fiscal capacity, industrial structures, and labor market priorities, diverse political alignments and policy structures contribute to the coexistence of an impetus, on the one hand, to develop a pattern of global universities and, on the other, a proliferation of alternative models of university development. Integrated national innovation strategies may be facilitated by conditions in which states or core industries are strong, highly concentrated, or linked institutionally with other key sectors, as in corporatism, that contribute to coupling of policy and practice (de Wit, 2002).

Globalisation as a process of social transformation impacts on “core functions” of institutions of higher education (Douglas, Mitchell & Nielsen, 2012: 7). In order to react to the influence of globalisation, higher education institutions internationalise their programmes and practices. Thus, higher education institutions are expected to formulate new policy direction to pursue internationalisation of the recruitment of faculty and students and to secure recognition for knowledge production, research and cross-national teaching that responds to pressure of globalisation (Altbach, 2004; Marginson, 2007).

Efforts to understand how higher education institutions become variously positioned to address issues associated with knowledge-based economies are frequently compounded by the imprecise ways in which knowledge and knowledge work are typically defined and measured. Researchers (Powell & de Wit, 2002; Altbach, 2004; Marginson, 2007) show how knowledge work is normally defined with reference to the core tasks involving the development, transfer or application of knowledge, high levels of education and specialised skills dependent, in large part, upon immersion in a high technology environment. The precise reference points for these terms tend to vary widely and are associated with diverse orientations that offer competing assessments of the role and extent of knowledge work in the global economy. Therefore, it is important first to

concentrate more on general policy considerations within which the repositioning of higher education institutions of innovation and knowledge work are occurring (Tefera & Greijn, 2010).

Thus, in the global knowledge economy, the role of higher education in knowledge production requires changed policies, practices and systems, with respect to national and regional contexts. A new global policy model that balances local and global knowledge demands is needed (Deem, 2001).

2.10 CONCLUSION

This chapter portrays globalisation issues in higher education perspective as well as the contextual dimension of globalisation discourses. Globalisation in the current arena is becoming debatable among scholars in different disciplines from different perspectives: as a merit and demerit, as opportunity or threat or as a risk and/or challenge. Higher education systems, policies and institutions are transformed by globalisation, which is the widening, deepening and speeding up of worldwide interconnectedness. Economic and cultural globalisation has impacted the way higher education institutions operate in the new era of globalization. Global higher education is more ontologically open than are organisational systems without a range of opportunities for innovations, alliances and markets.

As globalisation is leading the world under one umbrella, institutions of higher education should have a responsive policy to this global discourse in which the economic and political structures become more and more intersected by reliable and viable policies. As a result global higher education policy is an emerging area of research that examines the different ways in which globalisation processes, agents and events contribute to higher educational policy in the way demanded by both local and global development. In the global knowledge economy, higher education institutions are more important than ever as mediums for a wide range of cross-border relationships and continuous global flows of people, information, knowledge, technologies, products and financial capital.

The requirements of the knowledge economy dictate not only the type of knowledge considered valuable in the global market but also the type of human capital needed. The development of a pool of globally minded manpower, which has the ability to be intellectually independent and innovative, is needed for nations to be globally competitive. Globalisation has broken open the old role of government in higher education centered on bounded nation-states. The impact of globalisation has not only altered education policy, but also the way policymakers think about and study education policy.

In a globalised world, research as a basis for the knowledge economy, innovation and regional economic development, should address active and globally responsive research policies for higher education institutions. As a result higher education institutions are wrestling with the question of whether competition at home improves competitiveness abroad, and which combination of competition with collaboration will deliver the best results outside the border. Therefore, the relevance of global higher education means being responsive to global discourses, the world of work, levels of the education system, local development and cultures, research, quality assurance and graduating students and teachers.

In conclusion, in the global knowledge economy, higher education needs changed policies and practices, changed systems with respect to national and regional contexts and a distinctly new global model.

CHAPTER 3

ETHIOPIAN HIGHER EDUCATION POLICIES AND PRACTICES

3.1 INTRODUCTION

This chapter discusses the background and the current status of the Ethiopian higher education along with the current national development policy. It also focuses on Ethiopian higher education and its current status in the light of globalisation discourses and theoretical frameworks. It also attempts to look at the systems and practices of policies at higher education institutions in Ethiopia and provides an overview of the last 60 years' experience of different policy frames, expansion and future development plans. Furthermore, this chapter forms the basis of the study for the analysis of the various policy assessments and gives a description of Ethiopian higher education institutions. This chapter further depicts the current general education system of the country over the last 20 years with the implementation of the education and training policy of 1994. This chapter thus describes the policy practices of Ethiopian higher education from the perspectives of local and global demands.

3.2 ETHIOPIAN DEVELOPMENT POLICY IN THE HIGHER EDUCATION CONTEXT

This study was conducted in Ethiopia, where the population is about 88 million people, which is the second highest among African countries after Nigeria. According to the World Bank report, the population of Ethiopia is still growing at a rate of 2.5% per year (World Bank, 2013). Regarding the population, about 45% of the people fall into the youngest group of younger than 15 years of which 83 % live in the rural areas of the country. This shows that Ethiopia has a considerable potential regarding human resource development that can make a positive contribution to national economic development. From the geographical point of view, 65 million people inhabit the temperate highlands; the rest inhabit the lowlands. From an ecological point of view and with regard to the traditions of the country, agriculture is the main occupation for both the highland and lowland inhabitants (World Bank, 2013). The inhabitants of the highland temperate zones are engaged in farming, crop production and are well served with regard to

education; most of the inhabitants of the lowland are pastoralist and had limited access to education until the introduction of the 1994 education policy.

Based on the realisation of the agriculture potential and the existing young population, Ethiopia's development policy is designed to be agricultural-development-led industrialisation (ADLI). Ethiopia is one of the poorest countries even when compared to developing countries as well as other African countries. This country's population has experienced severe famine and endured starvation over an extended period. Traditionally, farmers engaged in only subsistence farming. There are neither educated farmers nor mechanised agriculture to satisfy the basic needs of the population such as food production, although the country has fertile land with sufficient and appropriate rainfall and enough water resources for potential irrigation. Thus, the Ethiopian government must design an alternative economic policy apart from that pertaining to agriculture (Belay, 2006).

Agriculture-led development is aimed at fostering development rooted in agriculture and thereby, gradually producing an educated workforce that can promote the birth of industry. Strategically, when agriculture is well developed, it realigns its position in industry; while the industry plays a leading role (MOFED, 2011:34). The broad attempt of the agriculture-led development policy is described as:

Modernizing agriculture and improving its efficiency and productivity, ensure food security, create employment opportunities and enhance the country's foreign exchange earnings with the aim to promote the development of a vibrant industrial sector and accelerate overall economic growth. ADLI is supplemented by sector-specific strategies in areas such as health, education, ICT, population, industry.

The Ethiopian government's ambition is to:

... to see Ethiopia become a country where a democratic rule, good governance and social justice reign upon the involvement its peoples, and

extricating itself from poverty becomes a middle-income economy” as recognized by a per capita income of 1000 USD by 2025 (FDRE, 2010, p.12).

To meet the long-term vision of the Ethiopian development policy, new policy formulation drives educational reform in general and that of higher education in particular. Appropriate educational access for rural dwellers especially those engaged in agriculture needs improvement with regard to agricultural education to foster improved agricultural productivity. At the same time, the focus on transforming agriculture and industry inspires higher education reforms in the areas of research and technology demanded at local and global levels.

Moreover, the intention of the Ethiopian government development plan can be met if the sustainability of educational reforms meets the pace of local and global demands through competitive performance (Teshome, 2004). Whatever the policy of the country, the skills of educated human resources ensure the implementation of a paper policy in practical terms in today’s globalised knowledge economy, where “information societies are emerging; higher education institutions are inspired to produce appropriately skilled human power required that link local and global knowledge demand (Teshome, 2004:17). Accordingly, to reduce poverty and to meet the middle-income economy by 2025, Ethiopian higher education institutions should revisit their programmes in the light of current local and global demands.

The reason for conducting research in the higher education policy area in the Ethiopian context is twofold. The first aspect is to overview to what extent Ethiopian higher education practices are responding to global demands and the second is how the aggressive expansion of Ethiopian higher education is responding to local development activities. As indicated above, the environment in which Ethiopian higher education operates is changing rapidly (Teshome, 2007). There is a rapid enrolment expansion of higher education and it is also facing inconsistent policy directions (Molla, 2013). The Ethiopian higher education proclamation (650/2009) encourages the quality and outreach activities of higher education with regard to both local and global standards in teaching and learning. However, the issue of whether public universities have an actual responsive policy directed at meeting local and global demands to improve the quality of their education in the current global discourse is not clear cut.

A review of some books and journals written on Ethiopian higher education (Tefera & Altbach, 2003; Teshome, 2007; Amare, 2007; 2008; Tesfaye, 2007, Tekeste, 1990; 2006) reveals the challenges and prospects concerning higher education expansion, academic freedom and brain drain issues. Mulu (2012) explains, “The first three authors dealt with the higher education development process and system in Ethiopia, whereas the others authors focus on academic freedom in higher education.” Articles and other publications in the “Ethiopian Journal of Higher Education” in previous decades focussed mainly on educational access, equity and expansion challenges and opportunities (Amare, 2005).

The Ethiopian government’s political commitment starting with the 1994 education and training policy illustrates the rapid institutional and enrolment expansion of higher education and the improvement of policy and strategic directions perceived as an attempt to ensure good quality higher education (Teshome, 2004). On the other hand, common strategic policies concerning research and community engagement with regard to local development, the common responsibility for global competition and internationalisation and programme standardisation are challenges facing Ethiopian higher education in this global arena. These trends raise concerns about a responsive policy for higher education and thus lead to demands for accountability regarding both global and local demands. Higher education institutions are expected to provide society with the knowledge and skills needed in the changing global landscape, opening new opportunities for the development and advancement of nations (Teshome, 2004).

Ashcroft and Rayner (2011) urge the Ethiopian higher education sector to improve its services in terms of both local and global intellectual and practical skills development. In practice, the response of the Ethiopian higher education sector to both global and local demands and the current global discourses is insignificant and needs a considerable change in policy direction.

The rapid changes in the higher education policies driven by political, economic and socio-cultural forces affected by the impact of globalisation through a holistic policy dimension became a challenge for developing countries in Africa in general and for Ethiopia, in particular (Teshome, 2007). These challenges include the massification of education, greater diversity regarding programme provision and student types, matching programmes to labour market needs,

shrinking resources, heightened accountability and the indirect steering of higher education. To react to these challenges, Ethiopian higher education needs responsive policies to achieve target growth and transformation.

Higher education in the current global arena runs academic operations within the global knowledge economy in diverse and multi-directional ways. The unique economic development policies of one country cannot stand alone in the competitive global world. This is a challenge for a developing country in contrast with the developed world. For instance, Ethiopia's economic policy is dedicated to agricultural led industrialisation (MOFED, 2010). One can raise certain questions, such as: Is the Ethiopian agricultural policy affiliated with the global knowledge economy? How and where will this knowledge be gained? How can agricultural practices and the knowledge society be linked? Higher education as a knowledge producer can answer the above questions appropriately if its policy is aligned with the current global demands. For example, graduates of agriculture disciplines should not necessarily know only local agricultural policies and practices, but also the integration of both local and global agricultural practices is expected (Belay, 2006).

As borderless education and higher education privatisation are becoming the two areas that impact on the higher education policy, local institutions are expected to revisit their policies based on the current global demands. Thus, every discipline being presented in any higher education institution should address both the global and local demands, which provide a good opportunity for the holistic development of both local and global employment of the graduates. Therefore, to meet both the local and global development demands, responsive higher education policies must integrate both the local and global perspectives.

3.3 THE DEVELOPMENT OF ETHIOPIAN HIGHER EDUCATION

Ethiopia introduced modern education in 1905, with the establishment of the Menelik School at the headquarters of Ethiopia, Addis Ababa. After about 50 years, higher education was initiated in 1950 with the founding of the University College of Addis Ababa. Research evidence shows that modern higher education began its operations with the onset of the 20th century that was

heralded by the establishment of the University College of Addis Ababa (UCAA) in 1950 (Mulu, 2011; Amare, 2007; Damtew, 2003; Teshome, 1990). At the very beginning, the University College of Addis Ababa (UCAA) was influenced by Western universities' training models and principles and based its models on the European and American models (Mulu, 2012).

Most policies of the University College of Addis Ababa were aligned with American and British higher education systems (Saint, 2004). During the establishment of the University College of Addis Ababa (UCAA) in 1950, Ethiopia did not have any reliable professionals to handle the teaching and learning process. As a result, the teaching and learning process started with expatriate academic staff particularly from the Western countries (Mulu, 2012; Belay, 2006). Following the establishment of the University College of Addis Ababa, other colleges and institutes, such as the Alemaya College of Agriculture (1952) and the Gondar Public Health College (1954) (Belay, 2006; Teshome, 2007); the College of Engineering (1952); and the Institute of Building Technology (1954) in Addis Ababa were established. In 1961, the UCAA became the Haile Selassie I University (HSIU) through the consolidation of the existing colleges (Belay, 2006; Teshome, 2007).

Furthermore, the establishment of colleges of teachers' education, polytechnics and agricultural institutes was continued in the late 1960s. For instance, Bahir Dar College of Teacher Education and Awassa College of Agriculture were established under the auspices of the HSIU (Teshome, 2007). Other institutes and colleges, such as the Bahir Dar Polytechnic Institute and the Jimma College of Agriculture, were also opened during this time. The HSIU and other colleges were structured in accordance with Western policy ideology and run in collaboration with foreign countries and international organisations such as the US, Canada, Sweden, WHO, USAID and UNESCO (Mulu, 2012; Belay, 2006).

According to Mulu (2012) and Belay (2006), the collaboration of foreign universities with the newly established colleges and institutes was a step forward for the development of the new higher education institutions in Ethiopian general. For instance, the University of Oklahoma was among those institutions that provided financial support and other support with regard to the curriculum, the staff and the administration of the Haramaya University, the former Alemaya

College of Agriculture. The present Addis Ababa University, the then Haile Selassie University (HSIU), became the strongest university with a highly committed board of governors with strong linkage between staff and administration (Mulu, 2012). Among others, in addition to the commitment of the HSIU with the support of foreign expatriates regarding delivering relevant programmes, it is transparent to the public through external evaluations with the aid of foreign consultants (Amare, 2007). During the period of 1950 to 1974, the new modern higher education system stated its mission and raised the idea of internationalisation and collaboration with foreign higher education.

During the operation of the military ruling classes, the 'Dreg regime' of 1974 to 1990, Ethiopian higher education structure and principles were influenced by the command economy and the socialist ideology of Marxism; during that era Ethiopia became isolated from the capitalist countries concerning its development and collaboration (Mulu, 2012; Teshome, 2004). Teshome (2007) avers, "the involvement of the private sector in higher education provision was also non-existent during these periods. Depending on the availability of space within Addis Ababa and the then Alemaya University and other limited colleges and institutes, an extremely limited number of students had an opportunity to access higher education (Teshome, 2007). The university admission procedures, particularly from 1974 to 1991, depended on the availability of spaces at the two universities, Addis Ababa and Alemaya Universities respectively, rather than on the competence of students. Thus, highly competent students were deprived of opportunities to access higher education for about two decades during the Derg regime.

At a glance, the Ethiopian higher education development from 1950 to 1974 was based on Western policy ideologies with greater academic freedom. Ethiopian higher education development from 1974 to 1990 was characterised by the low participation rate in higher education, poor collaboration with local communities, weakness regarding its research output and poorly connections with the international higher education community, leading to the collapse of policy directions (Teshome, 2003).

However, the 1994 education and training policy envisaged a higher education expansion policy that was realised in the last two education sector development programmes (ESDP III and IV),

especially from the year 2005 to 2014, seen in the increase of the number of Ethiopian public higher education institutions from two to 32 and with a higher education enrolment of 534,978 brought about by different policy reforms, such as the graduate mix and policy and programme diversification in line with the country's development policy (MOE, 2014).

3.4 THE ETHIOPIAN EDUCATION AND TRAINING POLICY

The Ethiopian Education and Training Policy refers to the current education policy implemented since 1994. The root of the policy is the new economic policy synopsis that encourages a free market economy (Teshome, 2004). This policy changed the landscape of the Ethiopian education system from primary to higher education and from the public to the private education system. The education and training policy tried to meet the country's human power demands at all levels. Another policy reform of 1994 resulted in regional education disparity reduction with primary to higher education being well addressed (Teshome, 2004).

The 1994 policy again addressed the new dimension of vocational and technical schools with regard to developing middle-level human power (Teshome, 2004). Technical and vocational training run parallel to the second cycle of secondary education, taking one to five years to complete, depending upon the programme and level of certification. The TVET stream is intended to produce semi-skilled workers by absorbing the majority of the non-university stream of Grade 10 graduates (Mulu, 2012).

During the current policy formulation of 1994, undergraduate and graduate degrees were offered at only two institutions: the Addis Ababa University and the Haramaya University. However, today 32 public higher educations are engaged in teaching, research and community service activities. Since the 1994 policy implementation, considerable achievements regarding the quantitative expansion concerning equity and access at all levels are encouraging, regardless of the quality of higher education (Amare, 2007). These achievements over the past twenty years have been "little short of extraordinary" (World Bank, 2003:5).

Arguably, the current education and training policy of Ethiopia achieved its targets with regard to overall access and equity compared to the previous regimes. In a few cases, higher education policies and strategies (Teshome, 2004) were also designed and implemented with the objective of ensuring national development and competitiveness. The structure of the education system as a whole was designed in such a way that it responded to the immediate manpower demands at the middle level and long term human power demands aligned with the country's development policy.

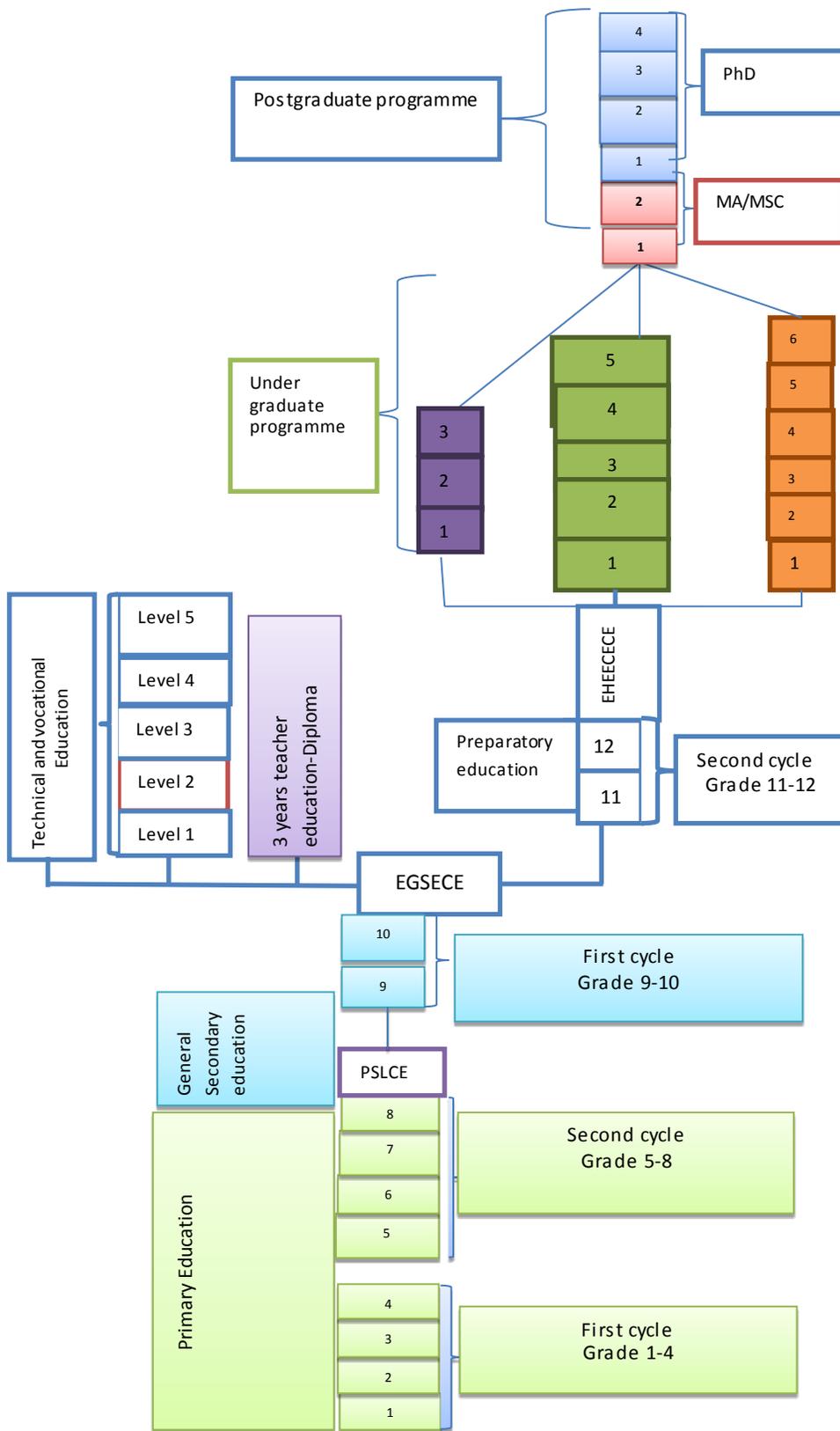


Figure 3.1: The current structure of the Ethiopian education system

Ethiopian primary education is freely accessible to all Ethiopian school age students to promote universal primary education. Primary education lasts eight years and constitutes two cycles of four years of education each: (1 to 4) first cycle and (5 to 8) second cycle primary education.

In turn, secondary education in Ethiopia consists of two cycles, each consisting of two years of education: (9 to 10) first cycle-secondary education and (11 to 12) second cycle-secondary or preparatory education. Preparatory education depends on students' achievement in the Ethiopian General Secondary Education Certificate Examination (EGSECE) (FDRE, 1994). Second cycle-secondary or preparatory education prepares students for higher education and is concluded with the Ethiopian Higher Education Entrance Examination (EHEEE). Students who are successful in the Ethiopian Higher Education Entrance Examination (EHEEE) can enrol at higher education institutions with an admission policy with a ratio of 70:30 (i.e., 70% of the students register for the engineering and natural science fields; 30% join the social and humanity fields) (MOE, 2008).

Students who fail to meet the national standards so that they qualify to enrol at Grade 10 and 12 levels or EGSECE and EHEEE can enrol at vocational schools run in accordance with the national technical and vocational education qualification agency policy that leads to a qualification from levels one to five. This shows that the Ethiopian education structure has a binary structure: universities that consist of bachelor's (three to six years), masters' (two years) and PhD (four years) degree programmes; and professionally-oriented technical schools and polytechnics that lead to certification from the lower level to the higher level.

Undergraduate programmes are offered for three, four or more years after completing preparatory classes after which a bachelor's degree is awarded upon completion of the applicable studies or the degree of Doctor of Medicine (MD) or the degree of Doctor of Veterinary Medicine (DVM). In 2013/14, the total number of undergraduate and postgraduate enrolments at public higher institutions was 534,978. Comparatively speaking, the expansion policy of education over the last ten years at all levels seems extremely aggressive in general and in higher education in particular (MOE, 2014). Since the current education and training policy endorsement implementation of

1994, an achievement with regard to access and equity in education makes Ethiopia stand first among the sub-Saharan countries (Teshome, 2004).

However, there are still many critics because of the poor quality of education at all levels. ATekeste (1996) and Tekeste (2006) discuss the poor quality of Ethiopian education. Belay (2006) addresses the poor linkage of Ethiopian higher education institutions with agricultural research extension. The high calibre intellectual brain drain is mentioned by Tefera (2010). On the other hand, the social and political driven demands, the expansion policy and the regional and social disparity in Ethiopian higher education are well argued by Habtamu (2004) and Tesfaye (2007). Teshome (2004; 2007) stresses the reform of Ethiopian higher education with regard to meeting its expansion policy, although the quality issues and its global dimension remain an issue in Ethiopian higher education. Tesfaye (2007:37) depicts institutional autonomy as:

..the majority of the teaching personnel in public higher education perceived institutional autonomy as very limited. Specifically, the academic community was believed to have little or no worthwhile role in educational policy-making processes at the national level and in the selection of the top leadership of the universities. The teaching personnel have no association that can represent or protect their interests. Apart from self-governance, institutional autonomy in administering and utilizing their finance, determining student admission and curriculum and programme development are also very limited.

While institutional autonomy and academic freedom are inseparable, one can deduce that the Ethiopian higher education policy recognition of UNESCO's 1997 declaration is not taken into account in most cases. Although research findings by the majority of Ethiopian scholars reveal some discrepancies in Ethiopian higher education, only a few recognise the global policy discourse. Thus, viable policies for Ethiopian higher education from global perspectives that include the key stakeholders of higher education with regard to the policies; strategies and programme development of their respective institutions within the global arena are needed.

3.5 THE ETHIOPIAN EDUCATION SECTOR DEVELOPMENT PROGRAMMES

The Ethiopian education sector development programme is currently undergoing a major transition and is reforming established educational institutions as well as initiating new policy dimensions. Based on the 1994 education and training policy, the Education Sector Development Programme (ESDP) is formulated every five years to put the education policy into action.

The first two ESDPs (ESDP I & II) focussed on universal primary education's achievement with regard to addressing access and equity and vocational education expansion respectively; the third and fourth ESDPs (ESDP III & IV) dealt with higher education expansion and the quality improvement of general education. The fifth Education Sector Development Programme (ESDP IV) to be conducted from 2014/15 to 2019/20 is continuing with higher education expansion and the quality improvement of all education systems (MOE, 2014). The hypothesised ESDPs' action (Ashcroft, 2004; Teshome, 2003; MOE, 1997) in 1995 and 1996 listed the following issues to be considered in the twenty years:

- The general status and major problems of higher education in Ethiopia,
- Issues regarding effectiveness and efficiency,
- “Alternatives for widening resource base of financial requirements.”
- Undergraduate and graduate programmes' quality and relevance.
- Research and studies in higher education.
- “Relations between regional governments and higher education institutions.”
- Relations between higher education and the other levels of education (MOE, 1997:29)

However, regarding policy clarity, the World Bank (2003: 3) states that “Ethiopian higher education has no clear policy direction.” The World Bank description highlights the lack of policy framework for an action plan for the higher education sub-sector under Education Sector Development III (ESDP III) that covered the period of 2005/2006 to 2009/2010. Because of these facts, the higher education proclamation 351/2003 has been further enhanced by the new proclamation 650/2009, which is now the basis for the legal transformation of higher education (Mulu, 2012).

In the fourth Education Sector Development (ESDP IV) phase during 2010/2011 to 2014/2015, a suggestion was made to reformulate the governance, research and community engagements for local development endeavours. However, the governance structure is seen as fragmented; most of the structures lack technical capacity; and a conceptual and political agenda should be promoted. Nevertheless, improvement in budget allocation for research and community service activities was observed in the fourth Education Sector Development phase.

A critical aspect of ESDP IV is its alignment with the Growth and Transformation Plan (MOFED, 2010) of the country. During this phase, emphasis was placed on higher education to be carried out in the local development programme through its mission referred to as community service, which is the third mission after research according to the Ethiopian higher education strategies. As the aim of the Growth and Transformation Plan of Ethiopia is to ensure the overarching development vision of the country to transform it into a middle-income country by the year 2025, due attention is given to quality humanpower production. Furthermore, the linkage of research and innovation with the local community and global demands and the quality of graduates for both local and global placement are a major intervention area of Ethiopian higher education within the parameters of the Growth and Transformation Plan of the country.

In order to standardise the teaching, learning and research procedures of Ethiopian higher education system, the government took the first step by establishing a higher education proclamation in 2003 as proclamation number 351/2003 (FDRE, 2003). This was an appreciable measure in terms of new policy formulation for Ethiopian higher education institutions. The new proclamation provided a thoughtful and forward-looking policy framework for guiding the growth of Ethiopian higher education in the current era of globalisation. Proclamation 351/2003 contributed to the establishing of two institutions; namely the Higher Education Relevance and Quality Assurance Agency (HERQA) and the Higher Education Strategy Centre (HESC), which now play a role in the standardisation of Ethiopian higher education in terms of the teaching and learning and research activities benchmarking other international higher educations. Higher education institutions are expected to contribute to the social and economic development of one country. This can be realised by delivering high-quality education with research of a high calibre for a fast growing number of graduating students. According to Mulu (2012:91), “in order to

produce high caliber manpower, it requires both quantitative and qualitative capacity development of the higher education.”

The Ethiopian Higher Education Relevance and Quality Assurance Agency (HERQA) and the Higher Education Strategy Centre (HESC) have attempted to improve the quality of educational programmes and graduates as well as curriculum standardisation (Ashcroft, & Rayner, 2011). However, the two institutions, HERQA and HESC, are young and irrelevantly qualified personnel handle matters pertaining to quality and the curriculum standardisation of Ethiopian higher education (Mulu, 2012).

Many attempts have been made in the past to reform the education system of Ethiopia by drawing up an education sector strategy document (MoE 2002, 2004; Teshome, 2007; Ashcroft 2004). In particular, a great deal of attention was given to higher education in the third education sector development programme (ESDP III), which introduced an expansion policy to the higher education system (Mulu, 2012). This expansion was effected with the support rendered by international consultants and many forums outside the Ministry of Education and other stakeholders that contributed to the increased government interest in expanding access (Mulu, 2012) which continued in the fourth and the fifth Education Sector Development Programmes (ESDP IV and V) for a period of (2010/11-2014/15) and (2014/15-2019/20) respectively.

The Higher Education Proclamations envisaged in 2003 (No. 351/2003) and later revised in 2009 (No. 650/2009) paved the way for the expansion and governance changes. These proclamations decreed the autonomy of higher education institutions, particularly in terms of administrative, financial and academic matters. The proclamation recognises both public and private higher education institutions. It contains provisions concerning the establishment and accreditation of private higher education institutions and the setup of the system support organs (Mulu, 2012).

The Higher Education Relevance and Quality Assurance (HERQA) and Higher Education Strategic Centre (HESC) in Ethiopia are autonomous government organs having their own legal standing to ensure the relevance and quality of higher education offered by any institution. HERQA plays a role in ensuring the relevance and standards of higher education, evaluating the

activity and performance and examining accreditation issues are some of the duties of the agency. HESC plays a role in standardising the curriculum of higher education that enables the system to remain compatible with the country's needs and international developments (Mulu, 2012).

The expansion of higher education over the last ten years is a unique realisation of the aims of the government's policy that correlates with the holistic development of the country. As a result of the third and fourth education sector development programmes, currently the Ethiopian universities are offering undergraduate degrees for three, four or more years at all 32 universities and specialisation degrees, masters' and PhD programmes in 12 public higher education institutions (MOE, 2013). This does not include higher education institutions such as a college of teacher education, administered by regional governments and the accredited non-government higher education institutions.

However, the enrolment in higher education is far below the country's demographic characteristics compared to those of other sub-Saharan countries (Mulu, 2012). The postgraduate programme in the school of graduate studies offered at a few universities with specialisation in masters' and doctoral degrees respectively accounts for only 25,103 and 3,165 students (MOE, 2013). This shows that in spite of the aggressive expansion of higher education aimed at offering undergraduate programmes, much must still be done to satisfy the required human resource needs through post-graduate programmes.

The dependency of the Ethiopia higher education on expatriate lectures from both an economic point of view and a cost-benefit analysis indicates that qualification disparities are exacerbating the teaching learning and research activities. This problem is still continuing despite a shortage of qualified academic staff at the levels required. In about 75% of the Ethiopian public universities, about 70% of faculty staff are qualified only to bachelor's degree level (Ashcroft & Rayner, 2011).

At a glance, the expansion and graduate mix policy of 70:30 is seen as the only means for the country's social and economic development strategies. However, the quality of academic staff and the basic resources for teaching and learning as well as standard workshops and laboratories

for students' practical work, especially in the science and technology discipline, are not being addressed properly (Ashcroft & Rayner, 2011). The policy environment especially is directly related to the global impact. Curriculum standardisation in the case of the Bologna process, global work placing of professionals, global research competition, global cross-border education, student mobility and local development policy endeavours regarding global competencies are among the policy issues not yet investigated from globalisation perspectives.

No one can overlook the quantitative expansion of Ethiopian higher education over the last ten years of the current policy environment, in which the landscape of Ethiopian higher education institutions has been changing rapidly (Mulu, 2012; MOE, 2010). However, within this rapid enrolment expansion process, the 70:30 graduate mix policy and the development of local and global manpower demands have not been analysed clearly. Public universities still face "inconsistent" policy directions (Mulu, 2012:107). In all Ethiopian higher education institutions, even in the senior public higher education sector in Ethiopia, institutional policy responsiveness to the impact of globalisation via an internationalisation approach seems non-existent.

Undoubtedly, the Ethiopian Ministry of Education's aim over the last two decades with the Education Sector Development III and the ESDP IV expansion and diversification policy is recognised by researchers and politicians at regional and international levels. Despite this recognition especially of the expansion policy, challenges concerning the quality dimension hamper the system. For instance, the unavailability of qualified academic staff is forcing institutions to recruit local staff who lack the required qualifications (Mulu, 2012), which, in turn, results in serious quality problems with regard to undergraduate programmes in general and technological disciplines in particular. This calls for a responsive policy standard that integrates local and global development demands.

3.6 SCENARIOS IN ETHIOPIAN HIGHER EDUCATION

In this section, the different scenarios pertaining to Ethiopian higher education are presented in detail in the light of current global discourses, access and quality, information and

communication technology, local and global knowledge demands, research, good governance, internationalisation and funding.

3.6.1 Access and quality

The Ethiopian education system in general and higher education in particular was characterised by low participation, inequitable access in certain regions as well as poor quality and lack of relevance. However, since the implementation of the 1991 education and training policy, access and equity have received more attention. Nevertheless, issues pertaining to the quality of the education system are crucial, while expansion of the system remains the main priority in spite of gains in this area.

The Ethiopian government higher education expansion policy continues with the inauguration of 11 new universities established during the Second Ethiopian Growth and Transformation (GTP II) phase of 2015/16 to 2019/20; this will raise the number of Ethiopian public higher education institutions to 43 (MoE, 2014). This shows the commitment of the government to provide opportunities for higher education for all who aspire to it. However, the quality issue is a challenge as most Ethiopian students pursue a degree for the status rather than to acquire competence required to meet local and global labour market demands.

The Ethiopian higher education system can be traced back about 60 years to a policy prototype of the American higher education system. The Ethiopian higher education system faces similar contemporary challenges as other countries do, resulting from the advancement of science and technology, economic growth, social change and the internationalisation and globalisation of the world economy. In order to meet these challenges, higher education institutions must respond to common global challenges in the context of local demands.

The impact of the internationalisation and globalisation in multidimensional ways led to a series of profound socio-economic changes with adverse impact on Ethiopian higher education policy. For instance, the frequent revision of the higher education curriculum without justification can be

ascribed to the multidimensional impact of global discourse. Currently Ethiopian higher education enrolls about 534,978 students in 32 institutions.

Assessment of the labour market that attracts graduates to the local development sectors and the global placement of graduates are further challenges. It is difficult to predict the demands of the labour market for local development, whether agriculture, industry or service organisations. Although the current higher education admission policy of 70:30 for engineering and natural science and social sciences and humanities respectively is in accordance with command directives from the ruling party of the Ethiopian government, there is no clear rationale for this policy.

In order to address the local and global demands for educated human resources, much still needs to be done to realize the policy reforms necessary required to balance local and global demands. It is important to narrow the institutional gaps of the policy by breaking down the departmental boundaries between different government agencies that segment the higher education system and reorientate the government - university relationship. This will enable universities to respond to the needs of socioeconomic development with regard to the local and global labour markets rather than being dictated to by the central government. Global environmental scanning for higher education is needed to produce competent and capable globally minded graduates.

Ethiopian higher education operates under the pressure of the central government and is politically influenced. Moreover, the expansion of Ethiopian higher education has not kept up with the demands in terms of either quality or quantity regarding production of graduates. As a result, it remains a challenge to improve the link between education and the workforce for Ethiopian universities which, in turn, presents serious problems for both graduates and employers. This emanates from a lack of a clear policy direction for the labour market as shaped by demand for local and global placements.

3.6.2 Information communication technology

Global knowledge dissemination of science and technology informed by the revolution in information technology has changed both the world economy and the higher education landscape (Knight, 2008). Technological development also exercises a global impact on Ethiopian higher education. In response to global technological development, only two or three universities are coping with local and global manpower demands; others are still at their infant stage.

The Jimma University is the only university with reliable information and communication technology applications with regard to teaching-learning and research output dissemination through teleconferencing. The impact of advances in information technology on the university-knowledge dissemination, lifelong learning and distance education is formidable. Thus, the limited access to information and communication technology necessitates new policy formulation that will respond to the evolution of the world economy towards a knowledge-based society. In this regard, systematic policies and strategies to assist Ethiopian universities should be formulated.

3.6.3 Local and global imperatives

As the Ethiopian economic policy is led by the agricultural sector with a view to improving productivity, advances in agricultural knowledge and skilled researchers in agronomy are urgently required. At least nine independent agricultural universities are required in each regional state. At present Ethiopian universities offer various different disciplines, such as, health, agriculture and education technology, in a single institution. There is no cluster specialisation in Ethiopian universities; all 32 universities offer all the disciplines, which, in turn, limits focused specialisation. The question of which university should specialise in which fields with regard to local or global knowledge production has not yet been answered. Moreover, there is still no differentiation by Ethiopian universities with regard to research universities or research and teaching universities to compete with global universities, regional or other African universities. With regard to local development, the most troubling aspect is that the graduates of Ethiopian higher education are not adequately equipped to serve local development sectors. The poor

responses of Ethiopian universities in sectors, such as agriculture, farming, fishing, forestry, indigenous crafts, services and trades that account for 85% of the economy, is due to weak policies in the light of local demands.

3.6.4 Research

Most of the research output in Ethiopian universities is not globally competitive. Few research studies have been conducted in applied research on agriculture-related fields; little research has been done in the social sciences at the Haramaya, Addis Ababa and Jimma Universities respectively. Research in Ethiopian higher education is predominantly carried out by individual academics for the sake of a professorships; other research tends to lack relevance to local development sectors.

The need for local development within the global knowledge society demands the restructuring of the framework of Ethiopian higher education based on an awareness of societal realities and needs. Specialisation, research and technological advancement in Ethiopian higher education lags behind other African Universities, such as Makerere University in Uganda and the Kenyatta University in Kenya. Thus, Ethiopian universities are unable to attract students worldwide or from its neighbouring African countries, such as Kenya or Uganda.

For instance, the Haramaya University, the then Alemaya University of Agriculture, is a well-known agricultural university in Ethiopia and Eastern Africa. At its establishment in the 1950s, Lake Haramaya provided the surrounding community with local transport, fishery, irrigation and drinking water. However, the lake has been disappearing over the last 15 years and at the time of this research, it has almost ceased to exist. Although several research papers deal with this phenomenon, no firm findings have emanated. At the same university the Department of Agricultural Engineering is in charge of agricultural tool improvement. However, the surrounding farmers continue to use a traditional ploughing system and post-harvesting technology is still scant. Beside some advances in plant breeding technology, all other universities in Ethiopia with agricultural units are at a par with the Haramaya University concerning their level of research performances

Another concern is poor linkage between universities and research institutes (Belay, 2006). The poor linkage of Ethiopian higher education with agricultural research institutes, environmental protection ministries, the Ministry of Agriculture, farming communities, nearby African agricultural institutions and universities create challenges with regard to cooperative research and technology dissemination. At the same time, research policy development with regard to the Ethiopian Ministry of Education and the Ministry of Agriculture have little impact on agricultural universities' research policies and the curriculum of agricultural disciplines because of poor communication between the Ministry of Agriculture, which governs agricultural practices, and the Ministry of Education, which governs all the education sectors. As a result, institutional policy gaps present an obstacle to for local development. Further, Ethiopian higher education policy does not accommodate internationalisation, which requires flexibility of the curriculum, student mobility and freedom for the advancement of knowledge, quality and relevance. As a result products of Ethiopian higher education are not accepted for employment in other parts of the world.

3.6.5 Governance

Good governance and institutional policies and the rule of law emanate from the country's Constitution. Accordingly, Oyewole (2006:2-3) argues as follows:

It is the country's institutional regimes, and policies, as well as the rule of laws, all of which encourage the efficient mobilization and allocation of resources, through decentralization that encourage the creation, dissemination and effective use of knowledge. The institutional and governance regimes are expected to provide good economic policies and institutions that permit the efficient mobilization and allocation of resources, and provide incentives for the dissemination and use of existing knowledge.

Ethiopian higher education is centrally administered and influenced politically. All leaders in Ethiopian higher education, presidents and vice-presidents are politically appointed. In almost all cases, the appointment carries no guarantee of academic quality, rank and competence; instead, it

is a political guarantee. This practice violates the UNESCO (2003) governance principle and although the decentralisation and autonomy of universities are decreed in the Higher Education Proclamation 650/2009, in reality the proclamation is not applied.

In most Ethiopian universities, the staff recruitment and appointment policy is not clear and the universities are subjected to inadequate or a total lack of guidelines on staff development. For instance, there are no clear policy guidelines for expatriate staff recruitment. In most cases, only expatriate staff from one country, India, is encouraged to seek employment at Ethiopian universities. Consequently, many Ethiopian university staff and students complain about expatriate staff development as it contradicts the principle of internationalisation, which encourages a diversified high quality personnel from different under the umbrella of globalisation.

3.6.6 Funding

Ninety-eight percent (98%) of all the Ethiopian universities' financial schemes have been reallocated and are governed by the Ethiopian Ministry of Finance and Economic Development (MoFED). The funding system of MoFED is restricted; accordingly, there is no space for flexibility with regard to research, teaching and learning purposes. At university level, the rigidity of the rules of financial administration for research mobilisation is another challenge. This can be ascribed to the limited capacity of financial administrators, who lack understanding of higher education research concepts. Most Ethiopian universities depend on this rigid funding system, while a few universities have developed additional funding schemes. Further, Ethiopian university funding schemes depend on limited diversified sources: foreign scholarships, international collaboration; research and consultancy programmes; these are critical issues that need to be revisited

3.6.7 Internationalisation

In the current global knowledge arena (Tefera & Altbach, 2003), hub areas of higher education specialisation for local and global competition are issues among scholars in higher education. This

raises the question of ranking among institutions at the local and global levels. The current Ethiopian growth and transformation plan has identified the quality of higher education as a key priority for ensuring relevance for all the sectors' development endeavours to ensure that they are compatible with the quantity, type and quality of the human resources demanded by the economy and national and international labour markets (MOFED, 2010).

Addis Ababa University (AAU) is the chief national higher education institution with a long and prestigious history. Following the Addis Ababa University, Haramaya University, the Jimma University, the Bahirdar University, the Mekelle University, the Hawassa University, the Gondor University as well as the Arba Minchi University and the Adama University constitute the core of the established higher education system which are currently striving to reach international standards. In particular, Addis Ababa and Jimma Universities are ranked among the top 100 African universities in terms of quality teaching, research output delivery and community engagements.

Compared to the other higher education institutions in Ethiopia, the Addis Ababa University is recognised in the global environment. Prestigious professors with ample research experience are found at the Addis Ababa University. This enables the Addis Ababa University to engage in international collaboration in areas of teaching and research more effectively than the other higher education institutions in Ethiopia. Furthermore, the Jimma University, with its innovative philosophy, "*We are in the community*", attracts projects in conjunction international institutions, particularly in the health disciplines, and has received global recognition.

3.6.8 Institutional linkages

Apart from teaching and learning universities, institutions are engaged in research and innovation activities at Ethiopian agricultural research institutes. These institutions are the dominant institutions in agricultural technology dissemination and are preferable to agricultural higher education, or agricultural universities. The linkage between agricultural universities and agricultural research centres is weak and the poor provision of practicals for students at an agricultural university does not receive any attention from other agricultural research institutions.

This indicates institutional policy gaps between agricultural universities and agricultural research centres (Belay, 2006).

From the perspective of technology development, ten universities (the Adama University, the Mekelle University, the Bahir Dar University, the Addis Ababa University, the Addis Ababa Science and Technology University, the Jimma University, the Dire Dawa University, the Hawassa University, the Haramaya University and the Arba Minch University) have been selected by the Ethiopian Ministry of Education for special training in technology by organising an Institute of Technology to address the current shortage of human resources in the engineering and technology sectors.

In essence, the capacity and experience of Ethiopian higher education institutions are not similar. Furthermore, the Ethiopian higher education system is poorly linked with industry and research institutions for research and innovation and students' practical training. This, in turn, has resulted in graduate skill gaps and theoretical knowledge in the world of work.

The other major issue in Ethiopian higher education development in the last 60 years in general and the last 20 years in particular is its weakness in identifying areas of specialisation, whether in technology, agriculture, health, business and teachers' education. Since 2007 the Ethiopian Ministry of Education subdivided higher education institutions into eight clusters based on their geographical proximity, each constituting about four institutions (MOE, 2010). However, there are no clear policy directions regarding the importance of clusters.

Ethiopia, although poor in technological development, is endowed with natural resources and fertile land for agriculture that is both rain fed and irrigated. The implication is that with the minimum technology input, maximum productivity in agriculture can be achieved which will contribute to economic development. However, the design of a policy which links agricultural and business development is still in its infant stage. During the 1950s, the agricultural universities (firstly, Haramaya University followed by Alamaya University) entered collaboration with the Oklahoma University, US. This shows how specialisation in collaboration with an advanced university brings about profitable technological development with minimum input.

3.7 THE IMPACT OF THE BOLOGNA PROCESS ON ETHIOPIAN HIGHER EDUCATION POLICY

Today the Bologna process is a global discourse influencing higher education policy. The influence thereof has spread to higher education in Africa. Ethiopian higher education endorsed the Bologna process in 2010. This section explores the impact of Bologna process on Ethiopian higher education policies and practices.

3.7.1 The Bologna process at glance

Globalisation provides opportunities and challenges worldwide for new structures in higher education, international students and changes in the higher education environment (Gebremeskel, 2014). The emergence of the new internationalisation approaches of higher education is described as “the process of integrating an international and intercultural global dimension into the functions of higher education (Knight, 2003: 2); globalisation, in general, has facilitated these dynamics. The movement of the European higher education reform efforts by mega institutions, such as the European Union, World Bank and other similar institutions, has facilitated this convergence that, in turn, has led to a close link among higher education institutions in the world (Gebremeskel, 2014).

On the surface, the Bologna process promotes cooperation among European higher education and has an effect on higher education in the US, Japan and China. Pursiainen and Zgaga (2006) express the view that the Bologna process is part of the larger script “in which people, ideas and information are moving freely across national borders” (Zgaga, 2006). Moreover Sweeney (2010:15) shows how the Bologna process is linked to globalisation by means of three basic rationales: shaping the global intellectual landscape, shaping international academic mobility and changing patterns of power and influence in today’s world. Bologna, by its very nature, is an opportunity for student mobility and curriculum flexibility. However, some legitimate higher education institutions, without a clear understanding of the Lisbon Strategy, feel that it presents total loss of their identity (Sweeney, 2010). Therefore, new global development policies of global cooperation and global *competition* in the field of higher education (Sweeney, 2010:17) must be

clarified. The aim of the Bologna declaration was “to ensure that the European higher education system acquires a world-wide degree of attraction” (Bologna Follow-up Group, 2009: 6). It is seen as an opportunity “for moving into the policy of curriculum restructuring on the national and international arena to develop a unified system that facilitates mobility, transparency and recognition of qualification from one educational setting” coherent and compatible with the European framework” (EUA, 2014). The Bologna process can be seen as a concerted pan-European response to societal shifts; it is a unique process that will continue to shape reality for years to come (Crosier & Parveva, 2013: 19). However, the cooperation among European institutions has also increased global harmony among other regional higher education institutions, changing the Bologna process from regional unification to global coordination through a responsive policy of internationalising higher education. Global higher education started as the Bologna process also impacts Ethiopia.

Although the Bologna process primarily supports the endeavour of higher education standardisation in Europe, its impact is felt in the developing countries of Africa and has become a regional agenda. Third world countries, especially African countries, are dependent on the European economy in most cases. Because of this their respective political and economic policies also emanate from European countries. Therefore, the economy is the core domain for the success of a country policy. African development policy is influenced by the donors from European countries. According to sector policies in education, health and agriculture, the goodwill of the Western countries is expected otherwise the implementation of the intended project is jeopardised (Sall & Ndjaye, 2008). Thus, the Bologna process shapes higher education institutions not only in Europe but also in Africa.

3.7.2 Effect of practices of the Bologna process on Ethiopian higher education system

African countries, among others Ethiopia, are attempting to reform their higher education to meet the standards of the Bologna process. According to the Bologna process, higher education is expected to meet a wide range of needs for evolving knowledge societies and economies “developing research and innovation, responding to local and regional economic challenges, and acting to improve quality and efficiency in all aspects” (Crosier & Parveva, 2013:19). In Africa,

because of differences in demography, levels of academic infrastructure and the local challenges, effective African higher education harmonization takes time. Attempts at harmonising African universities have been made to provide an umbrella for enhanced cooperation (Association for the Development of Education in Africa, 2011).

Higher education in Africa is not harmonised as in Europe. However, some African countries have independently adopted the harmonisation policy of the Bologna process. To meet the global knowledge demand, most Africa universities are compelled to adopt the Bologna process (Association for the Development of Education in Africa, 2011). In accordance with the policy of the Bologna process, all the public universities in Ethiopia are currently implementing the new competence-based education curricula and the credit transfer system is under implementation (Gebremeskel, 2014).

As noted in previous sections, Ethiopian higher education policy during 1950 to 1974 was aligned with those of the Western nations, and particularly the US and Britain. This period gave an opportunity for the newly established Ethiopian universities to operate within an international milieu. At present, because of the current global discourse and responsive policy demands with regard to internationalisation, the Ethiopian higher education sector is attempting to implement policy to align its system with the current regional and international demands. For instance, European Credit Transfer System (ECTS) and modularisation, the flexible learning path, recognition and mobility were selected from the basic elements of the Bologna Process (Gebremeskel, 2014). The ECTS has been adopted as the Ethiopian Credit Transfer and Accumulation System. However, this lacks clarity regarding curriculum design and its validation (Gebremeskel, 2014). However, the study programmes make it easy for the academic recognition of both, local and international students. The long-term expectation is that the implementation of the ECTS will realise the Bologna process that promotes common policy regulations between regions for everyone's mutual benefit (Crosier & Parveva, 2013).

As has been noted, only two Ethiopian universities, the Addis Ababa and Haramaya Universities, were established five to six decades ago; the rest were established from 10 to 20 years ago. This shows that almost the entire Ethiopian higher education system is in its infancy compared to

European higher education system. Private higher education institutions are the youngest of all compared to the rest of the public higher education system of Ethiopia (MOE, 2013). Within this context, the Ethiopian higher education system is attempting to reform its structures regarding the global higher education perspectives of which the Bologna process is a typical model. To make the Ethiopian higher education system compatible with the Bologna process or the policies of European higher education, the Ethiopian Higher Education Strategic Centre (HESC) has formulated and designed the modularisation principles within the last five years. Today, all public universities of Ethiopia are exercising modularisation and credit transfer systems (MOE, 2013). Before modularisation, Ethiopian higher education “institutions were using a traditional credit system that was expressed in terms of teachers’ loads”. Gebremeskel (2014:19) states that “previously this system did not say anything about students workloads.” However, with the use of the Ethiopian Credit Transfer and Accumulation System, many practices have been changed. The course workload calculations with regard to students and teachers are clearly articulated in the Ethiopian Credit Transfer and Accumulation System with a new grading system in the accompanying academic policy (MOE, 2012) Gebremeskel (2014:10) describes the practices of the Bologna process at Ethiopian Universities as:

For instance, the semester load of students was changed to 30 ECTS and the total ECTS load for different degree levels was also made to fit with the suggestion of ECTS user guide developed by the European Communities in 2009. This use of ECTS by all Ethiopian public universities is a good reflection of the Bologna's influence that changed the thinking of workload from teachers to students.

The Bologna process was initially regional but now it has become global and this has played a significant role in the reform process of the Ethiopian higher education institutions (Gebremeskel, 2014). A curricular reform component seen in the European Higher Education Area was aligning the existing curriculum or designing new academic programmes with the ideals of competence-based education. This has brought about a shift in curriculum thinking to design a curriculum based on the local and global knowledge demands. The Ethiopian higher education sector is attempting to incorporate competence-based education as “a means aligning

academic programmes in line with the capability of students to function effectively in the world of the market” (Gebremeskel, 2014:13). Attempts have been made when designing the initiatives to promote the ratio of 30:70 social and computational engineering students proposed in the admission policy to align with the post-industrial knowledge economy that advocates competence based education. The closer link between academic learning and professional practice through competence-based education characterises the Bologna process (Gebremeskel, 2014). According to HESC (2013), modularisation is promoting compatibility and curriculum flexibility as well as student mobility in line with with the Bologna policies and practices. This clearly shows the impact of the Bologna process on Ethiopian higher education with regard to restructuring its mode of delivery in the global market (HESC, 2013).

Other emerging elements of the Bologna process are flexible learning paths and recognition and mobility. However, due to Ethiopian higher education policy gaps, it is difficult to reform the universities for international mobility although the local mobility of students within Ethiopian universities is well developed. At the same time, standardising the module competence at international level, curriculum flexibility and scholarship policies still need attention. To achieve transparency of degree structures, mobility within and outside the country and a credit system at regional and international level for the mutual benefit of the Ethiopian higher education system within the global higher education system calls for the reformulation of policies (Gebremeskel, 2014). On the other hand, the Ethiopian higher education system has introduced elements of the Bologna Process, such as the ECTS, that has brought about “a shift in thinking and practice” in the teaching and learning process” (Gebremeskel, 2014:10).

The alignment of the Ethiopian higher education National Qualifications Framework with that of the European Qualifications Framework as well as with other globally recognised institutions is another challenge for the relevance of Ethiopian higher education qualifications in the current global arena. Therefore, to narrow the gaps and minimise the challenges,. the principle of “thinking globally and acting locally” helps with setting general standards and procedures for Ethiopian higher education institutions while incorporating the Bologna process and other global demands into a comparable and reliable policies.

In order to address the current global demands, flexible curricula, competency-based education and student mobility policies render higher education globalised. In this regard one can learn much from the Bologna process. However, from another angle, one can judge that some aspects of the Bologna may lead to neglect of local realities.

3.8 THE ETHIOPIAN HIGHER EDUCATION IN GROWTH AND TRANSFORMATION PLAN

The Ethiopian government has endorsed the growth and transformation plan to boost the country's economic development in line with the middle-income countries by 2025. The first phase of growth and transformation plan was endorsed in 2010 till 2014/15. It extends over five year periods until Ethiopia becomes a middle-income country by 2025. In order to achieve the intended target by 2025, the Ethiopian government expects higher education to play a role in local development that, in turn, promotes the competitiveness of the country with regard to global development. The quality of knowledge and the knowledge economy relies on the quality of research and innovation that higher education delivers to meet the global knowledge demand (World Bank, 2009). Regarding the World Bank recommendation, "Ethiopia is currently engaged in a highly ambitious effort to re-align its higher education system to contribute more directly" to the country's development endeavours (FDRE, 2010). The Ethiopian Education Sector Development Programmes in general and that of higher education in particular must be aligned with the growth and transformation plans (GTPs) aimed at improving graduate and post-graduate programmes with the capacity to engage in research and drive innovation, with special emphasis on science and technology. On the legal basis of the Growth and Transformation Plan, Ethiopian higher education institutions are expected to promote research focussing on knowledge and technology transfer consistent with both the country's priority needs and the global demands (MoE, 2010).

Besides the expansion policy of higher education, the Ethiopian Ministry of Education inaugurated the "programme mix policy" (Mulu, 2012, p.39) in all the higher education institutions in 2008. The basis for the mix programme policy was to balance the qualified human power for the growth and transformation plans to revitalise the current country's economic basis

from an agriculture-based economy to the export-led economy (MOE, 2008). Even though no thorough studies have been done on the legal basis of the graduate mix policy; the aim is to fill the gap observed in qualified human power through science and technology education. This is why the 70:30 graduate mix policies have been practised since 2008 (Mulu, 2012).

The programme mix placement policy initiates the demand for science and technology expansion and the inception of students at high school levels that brings and prepares students for admission to universities with a proportion of 70:30 (70% of the student students are admitted to science and technology fields of study, while the remaining 30% are encouraged to study in the social science and humanity streams (MOE,2008). This proportional admission of students' placement at public higher education institutions is done in accordance with the Ethiopian Higher Education Entrance Certificate Examination (EHECE) results (Mulu, 2012).

The intention of the policy (MOE, 2009) is to have science and technology graduates with 70% school leaving students joining higher education in the fields of science and technology and to have 70% of the students graduating in science and technology. However, the graduate mix policy of Ethiopian higher education resulted in a rapid increase in science and technology enrolments with large numbers of new entrants at all Ethiopian public universities. An attempt was made to increase the enrolments in graduate and post-graduate programmes to 500,000 with special emphasis on science and technology with an enrolment capacity of 300, 000 students at the end of GTPI. This will continue at the same rate until 2025 (MOE, 2010). However, Mulu (2012) states that a “rapid increase in enrolments in the science and technology streams, without much preparation, will have an adverse impact on the quality of graduating students’ from science and technology streams.” The focus on successive growth and transformation plans, addresses the issue of improving academic staff qualifications with second and third or terminal degree holders and a second degree as a minimum qualification level and of fostering increasing research and technology transfer capacity (FDRE, 2010).

On the other hand, the government has taken initiatives to recruit expatriates from India and China, South Korea and Germany especially for universities with institutes of technology. Moreover, another challenge observed is that there are still expatriates who do not conform to the

new modular approaches of the harmonised academic policies. Most expatriates come from eastern countries, whereas the modular approach policy is imported from the West leading to a complicated situation during the implementation of teaching, learning and evaluations.

The Ethiopian Ministry of Education (2013) reports the placement ratio of science and technology to social and humanities sciences in public universities is still fluctuating. For instance, during the last three years (2012-2014), the placement ratio has been fluctuating within the range of 74:26 and 67:33. Preparing 70% secondary school students for science and technology at university level requires considerable efforts to revisit the structure and curriculum of Ethiopian secondary education.

The current attempts made by the Ethiopian government's programme mix policy for university students, when observed at a glance is to fill the gaps observed in research and innovation in the areas of science and technology and these efforts are highly appreciated. However, in practice, it is difficult to maintain the pace of quality education when preparing students at high school level. As high schools are feeder institutions for higher education institutions, the way the traditional curriculum is devised and the new intake policy harmonisation is a challenge for Ethiopian higher education.

3.9 CONCLUSION

This chapter presents the overall background regarding the Ethiopian economic development and the current status and scenarios of higher education institutions policies and practices in Ethiopia. As indicated in the previous section, the Ethiopian economy depends mainly on agriculture. The current growth and transformation plan of the Ethiopian government endorsed in 2010 proposed that agriculture, as a leading sector, should be transformed into an industry. Because of this fact, the country's economic development is seen as agricultural-led industrialisation (ALI) (MOFED, 2010). The objective of the Ethiopian government is the holistic development of all sectors basing agriculture as an engine of the economy.

The basis of the modern higher education in Ethiopia was developed under the influence of both the British and the Americans. Because of this reality, modern Ethiopian higher education,

though young in its age compared to other African countries, was influenced by Western higher education policies, especially from 1954 to 1974. The period of 1975 to 1991 was the time where the Ethiopian higher education collapsed unintentionally. The reform landscape of the Ethiopian higher education, that evolved from the current Ethiopian Education and Training Policy of 1994, stressed higher education expansion for economic and social transformation of the country. To put this into practice, the government introduced initiatives extending over twenty years. The Education Sector Development Plans (ESDPs) aligned with the government's short-term development plan and a five year progressive plan. The Education Sector Development Plans III and IV of (2005/6-2014/15) are the roots of the Ethiopian higher education expansion policies resulting in the increase from two to 32 public higher education institutions, with enrolments of 31,000 to 534,978 respectively. In addition, the admission policy was also designed in a way to meet the country's demands in science and technology for a ratio of 70 to 30 (graduate mix of 70% from science and technology disciplines to 30% in the social science and humanities). Furthermore, to align with the Bologna process, the harmonisation policy, competence based education and credit transfer systems were endorsed at all Ethiopian public universities.

The following chapter presents the research design for the empirical inquiry.

CHAPTER 4

RESEARCH DESIGN

4.1 INTRODUCTION

This chapter deals with the methodological approach and the design of the study. The chapter begins with an explanation of the conceptual framework of research paradigms. It describes and justifies the methodology and procedures used in conducting the study, including formulating and justifying the adopted research approach and research design. The chapter also presents a description of the research sites, sampling procedures, data collection instruments, data analysis, the issues of validity and reliability and ethical issues.

4.2 RESEARCH PARADIGM

A paradigm is a set of beliefs about one's own worldview which helps one to understand the world (Guba & Lincoln, 1994). It is the position whereby the researcher stands to choose his or her methodological principles when searching for knowledge and truth. Thus, the question of methods is related to the question of paradigms. The research paradigm in all research disciplines is important to ensure whether there is a fit between the research problem and the research questions, a fit between the questions and the methods and a fit among the techniques, the data and the means of data handling (Guba & Lincoln, 1994). A thorough understanding of the research paradigm is needed to choose the best possible methodological design, which depends on the nature of the discipline and responds to the research questions (Bryman, 2004). It is crucial for the researcher to clarify the inquiry and methodological choices and explore the paradigm adopted for the problem under study (Maxwell & Loomis, 2003).

In order to determine the appropriate research paradigm, ontological and epistemological assumptions should be considered if a researcher is to design appropriate research methods (Cohen et al, 2007). A number of issues identified indicate the approach a researcher takes to research design, such as paradigm stance, strategy and method. Creswell (2003) maintains that the design is influenced by three factors: the match between the problem and the approach, the

experiences of the researcher and the audience. Considering different paradigm approaches, Bryman (2004) sees the principal orientation to the role of theory in relation to research to be either deductive or inductive: the epistemological orientation incorporates either the practices and norms of the natural model of science or sees the world as interpreted by individuals; the ontological orientation comprises whether social reality is viewed as external and objective or as constantly shifting, dependent on creation by the individual (Bryman, 2004).

In earlier times two major dominant research paradigms were categorized as the quantitative approach employed in hard sciences and rooted in the positivist paradigm, and the qualitative or naturalistic approach rooted in the constructivist paradigm and the social sciences (Guba & Lincoln, 1994). These two paradigms differ in their basic belief systems based on ontological, epistemological and methodological assumptions (Cohen et al., 2007).

From an ontological point of view, according to the positivist paradigm, reality is single, tangible and fragmental. However, according to the naturalist paradigm, no one single reality exists. Realities are multiple, constructed and holistic. The naturalistic paradigm is further supported by the interpretive paradigm that posits the essence of reality as subjective; knowledge emanates from social interaction (Guba & Lincoln, 1994).

From an epistemological point of view, the positivist paradigm advocates that 'knower and known' (Cohen et al., 2007, p.7) are independent of one another. Here, the researcher can be independent of the participants; research data can be generated with the absence of the researcher. However, according to the qualitative or naturalist paradigm, knower and known are interactive and inseparable. In this case the researcher and participants are dependent on each other and equally important from inception to conclusion. The post-positivist paradigm with the principle of uncertainty emerged from the positivist paradigm (Crotty, 1998) and gave rise to the naturalist paradigm.

From a methodological point of view, the positivist paradigm employs quantitative research methods that generate numerical data subjected to statistical analysis for generalization. In contrast to this, the naturalist paradigm employs qualitative research methods that generate non-

numerical data, ideas and opinions and social constructs for contextual understanding (Creswell, 2009). These two major paradigms, positivist and naturalist (constructivist) were the subject of paradigm ‘wars’ among researchers in different disciplines in general and hard science and social sciences in particular.

4.2.1 Mixed methods research

According to the post-positivist pragmatist paradigm, mixed methods research is recognized as the third major research approach or research paradigm (Johnson et al., 2007:112). Greene and Caracelli (2003) call pragmatism the simplest practical approach to the problem and it has a strong association with mixed research methodology. The pragmatist paradigm shifted the attention of many researchers to the mixed methods approach – the ‘mixing’ of quantitative and qualitative approaches during data collection. The use of methods drawn from both quantitative and qualitative approaches within one study complements the mono-design (quantitative or qualitative approaches) (Creswell, 2003).

Pragmatists link the choice of approach directly to the purpose of and the nature of the research questions posed (Creswell 2003). Moreover, Tashakkori and Teddlie (2010) advocate the practical application of the pragmatist approach through mixed method research in education and the social and behavioral sciences. The pragmatist paradigm is a set of beliefs which illustrates the response to the debate surrounding the paradigm ‘wars’ and favours mixed methods and mixed model approaches. It is pluralistic based on a rejection of the forced choice between post-positivism and constructivism (Creswell 2003). Different studies reveal the diversity of ways in which social researchers use mixed methods. Collins et al (2006:78-90) identify five broad rationales:

- Researchers use mixed methods to improve the accuracy of their data.
- Others use mixed methods to produce a more complete picture by combining information from complementary kinds of data or sources.

- Mixed methods are used as a means of avoiding biases intrinsic to single-method approaches - as a way of compensating specific strengths and weaknesses associated with particular methods.
- Mixed methods are used as a way of developing the analysis and building upon initial findings using contrasting kinds of data or methods.
- Mixed methods approaches are often used as an aid to sampling with, for example, questionnaires being used to screen potential participants for inclusion in an interview program.

Onwuegbuzie (2007) identifies the challenges of mixed methods research in designing, data collection and analysis strategies. Thus, one needs to articulate the right design techniques at each level of integration of data collection and choose tools appropriate to mixed research design. Mixed methods are known for intuitiveness appeal, permission to study areas that are of interest, embracing methods that are appropriate and using findings in a positive manner in harmony with the value system held by the researcher (Creswell 2003). For these reasons the pragmatist paradigm can be adopted for the purpose of social and management research; it is congruent with a mix of quantitative and qualitative approaches in practitioner-based research (Creswell 2003). In this case, quantitative and qualitative elements of research are used within one study to supplement each other in an integrated manner. This implies that the overall approach to research is mixing data collection methods and data analysis procedures within the research process (Creswell, 2003).

Creswell and Plano Clark (2007: 288) identify six major designs of mixed method inquiry:

- sequential explanatory
- sequential exploratory
- sequential transformative
- concurrent triangulation
- concurrent nested
- concurrent transformative.

The authors also suggest four criteria to determine the type of mixed methods design for a given research study. These include: the implementation of data collection, the priority given to quantitative or qualitative research, the stage in the research process at which integration of both methods occurs, and the potential use of a transformational value or action-oriented perspective in their study. The integration of quantitative and qualitative results into a coherent conceptual framework is an important step in a mixed methods study.

Furthermore, Tashakkori and Teddlie (2003) came up with three basic areas where mixed methods are superior to mono-methods (i.e., either the quantitative or the qualitative approach). Firstly, mixed methods can answer research questions that other approaches cannot entertain and mixed methods can answer confirmatory and exploratory questions simultaneously. Secondly, mixed methods provide stronger inferences through depth and breadth in answering to complex social phenomena. Thirdly, they provide the opportunity for an expression of differing viewpoints through divergent findings (Tashakkori & Teddlie, 2003).

Furthermore, Bryman (2004) explains the practical implications of mixed methods to research. Bryman posits a number of uses for what he terms not mixed methods but the combining of quantitative and qualitative research tools for the purpose of triangulation: to fill the gaps left when using one dominant approach; the use of quantitative research to facilitate qualitative research and vice versa; to combine static and procession features; to gain the perspective of the researcher and the researched; to address the issue of generality; and to study different aspects of a phenomena (Bryman, 2004).

Creswell (2003) and Bryman (2004) show the usefulness of integrating elements of quantitative research methods with qualitative research methods for reliable data analysis through triangulation techniques. In general the mixed methods approach is preferred to develop a better understanding of complex phenomena by triangulating and complementing one set of qualitative and quantitative tools with another and thereby enhancing the validity of inferences of the research result.

4.3 DESIGN OF THE STUDY

The aim of this study is to determine the responsiveness of Ethiopian higher education policy to current global demands. Most social science and educational knowledge emanates from the interaction of social phenomenon. In the case of education, the ontological assumption is that there is no single reality; from an epistemological perspective, sources of knowledge are dependent on each other (Guba & Lincoln, 1994). Moreover, Creswell (2003:6) recommends the pragmatist paradigm that states a fit-for-purpose research strategy; pragmatism is “a concern with applications ‘what works’ and solutions to problems”. The author argues that the problem is most important, not the method, and that researchers should use all approaches to understand the problem Creswell (2003). Furthermore, the applicability of mixed research design in educational research shows that the nature of study determines the approach of the design (Creswell, 2009).

In this study the researcher employed a mixed methods approach that aligns with the pragmatist strategy; however, this study is more situated on the quantitative than the qualitative end of the continuum. The quantitative aspects are considered plausible to explore Ethiopian higher education institutions. The quantitative component generated data from a wide number of sources about the respondents’ knowledge and practices regarding the impact of globalization and the nature of the Ethiopian higher education policies and practices via a structured questionnaire. Whereas the qualitative descriptive approach employed obtained in-depth understanding of the current global discourse and higher education practices in Ethiopia from selected participants via focus group discussions and document analysis.

Among the different design approaches of mixed methods (Creswell & Plano Clark, 2007), the triangulation model was considered the most appropriate to gather data using different methods from different sources. The method and instrument triangulation enhanced the convergence of results, thereby producing a relatively comprehensive picture of the issue under study. Its complementarity (using the strengths of one method to complement the weaknesses of the other method) improved the breadth and depth of the data (Tashakkori, 2007). The model corresponding to approaches of mixed methods triangulation design used for this particular study is illustrated in Figure 4.1.

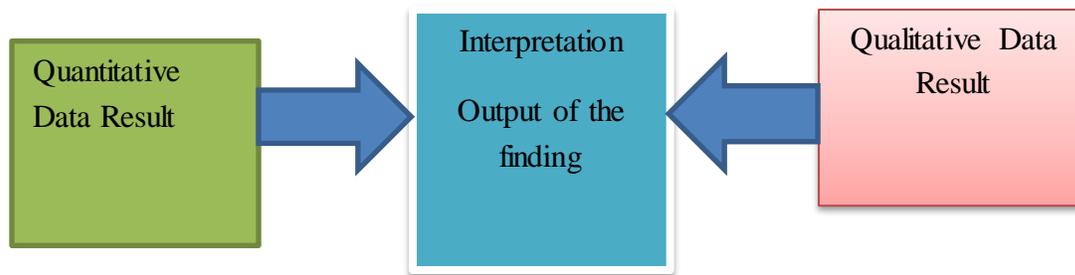


Figure 4.1: Triangulation model of the research design

In the triangulation model, instruments of data collection are designed in such a way that they complement one another. In this study, qualitative instruments were designed to complement the quantitative instruments. The rationale for this approach was that, while the quantitative data and results are expected to provide a general picture of the research problem (i.e. policy practices in higher education from global perspectives), the qualitative data derived from key participants and official documents explain participants' views more in depth, complementing the statistical results.

Basically, the data collection for this study on Ethiopian higher education policies and practices in response to globalization entailed:

- A survey questionnaire which provided insight into the policies and practices in teaching and learning, research and international cooperation and local and global development demands.
- Focus group discussions which provided insight into opinions and views of academic officers who have direct responsibility in institutional policy initiatives (discussed in detail in 4.4).
- An analysis of official documents that provided insight into institutional system policies and guidelines and international initiatives.

The above-mentioned data collection methods for this particular study produced both quantitative and qualitative data.

4.4 SITE SELECTION AND SAMPLING

4.4.1 Selection of institutions

Currently there are 32 public higher education institutions in Ethiopia engaged in teaching-learning, research and community service activities. These higher education institutions are subdivided into three generation institutions based on the age of establishment and levels of academic diversification. The first generation category constitutes 10 public higher education institutions; the second generation constitutes 13; and the third generation constitutes 9. Since the second and the third generation higher education institutions are considered as higher education still under establishment, they were not included in the study. From the first generation six higher education institutions, namely, Addis Ababa University, Bahir Dar University, Jimma University, Haramaya University, Hawassa University and Mekelle University, were selected purposively. These are well-established institutions which offer a variety of programmes at undergraduate and postgraduate levels. Further, these universities are regarded as mature and prestigious universities in Ethiopia.

4.4.2 Sampling of questionnaire respondents

Most academic staff in Ethiopian universities are at a rank below lecturer level with less than five years' experience, In this study, out of a population of 1 572 staff from the six institutions combined, 345 respondents from the rank of lecturer and above with at least five years' experience in teaching, research and community service were purposefully selected. The criterion for inclusion for academic staff was based on years of experience, academic rank and engagement in teaching learning, research and community services. Out of a population of 2 460 postgraduate students from the six institutions combined, 311 postgraduate students were also purposefully selected. The criteria employed to select postgraduate student was based on their availability in the campus and level of their study years and specialization. In this regard PhD programme and master's programme students specializing in education policy, curriculum, economics, and agriculture were involved in the study. Second degree students (Master's programme students) and third degree students (PhD programme students), who were attending

their courses in their respective campuses were involved in the study. The final year students of Master’s and PhD programme were not involved in the study as they were off campus for research purposes.

Accordingly, from Addis Ababa university 60 academic staff and 75 postgraduate students were selected; from Bahir Dar university 53 academic staff and 50 postgraduate students were selected, from Haramaya university 50 academic staff and 60 postgraduate students were selected; from Hawassa university 50 academic staff and 60 postgraduate students were selected; from Jimma University 55 academic staff and 60 postgraduate students were selected; and from Mekelle university 41 academic staff and 45 postgraduate students were selected.

Table 4.1 shows the respondents per rank: 26.40% lecturers, 14.50% assistant professors and 6.10% associate professors and 53.0% were postgraduate students.

Table 4.1: Study Participant by Academic Rank

University		Rank			
		Lecturers	Assistant professors	Associate professors	Postgraduate students
Addis Ababa	N	10	24	10	51
	%	10.50%	25.30%	10.5%	53.7%
Bahir Dar	N	40	7	6	41
	%	42.6%	7.4%	6.4%	43.60%
Jimma	N	25	12	3	60
	%	25%	12%	3%	60%
Haramaya	N	15	13	5	43
	%	19.7%	13.5%	5.2%	53.1%
Hawsssa	N	23	18	4	51
	%	30.2%	23.7%	5.30%	56.60%
Mekelle	N	23	13	5	43
	%	27.4%	15.5%	6.0%	51%
Total	N	136	79	33	289
	%	26.40%	14.50%	6.10%	53.0%

4.4.3 Selection of participants for focus group interviews

Nine key informants per institution, selected purposively on the basis of their rich experience in teaching and research experience at institutions of higher learning, participated in focus group discussions which comprised of a total of 54 participants. These participants were selected among assistant and associate professors and PhD students from each university who participated in survey questionnaire. The sampling technique employed was subjected to the nature of the problem and the chosen paradigm, the mixed approach in this case. The focus group was represented as follows: 8 associate professors; 12 assistant professors; 20 lecturers and 14 PhD students. They were chosen purposefully on the basis of their rich experience in higher education and other working environments.

4.5 DATA COLLECTION

Structured questionnaires, focus group based on a discussion guide and document analysis were employed to generate data.

4.5.1 Questionnaire

A questionnaire addressing globalisation in the context of higher education was developed based on the conceptual and theoretical framework of the study (see Appendix A). This questionnaire was divided into six parts and comprised: Part 1 (4 questions) aimed to gain background information about the respondents. Part 2 (15 questions) investigated the conceptual understanding of realities of globalization in higher education context. Part 3 (21 questions) looked at the extent to which Ethiopian universities responded to local and global knowledge; the extent different role players played in standardizing Ethiopian higher education to global level; the respondents' understanding of the Bologna process and institution regional ranking. Part 4 (6 questions) investigated the existence of follow up policies and employment opportunities for graduate students in response to global needs. Part 5 (12 questions) focuses on whether institutional policies at local level respond to globalization policies. In Parts 4 and 5 provisions were made for open ended questions.

The paper-and-pencil questionnaire was self-designed and self-administered. The structured survey questionnaire was adopted and designed by the researcher with the support of supervisor using the five scale type of Likert measurement: 1 signified strongly disagree; 2 disagree, 3 neutral; 4 agree and 5 strongly agree. The questionnaires were distributed and collected by assistant data collectors recruited by the researcher under the guidance and close supervision of the researcher.

A total of 345 questionnaires were distributed to postgraduate students in the six universities. 289 (83.7%) students responded. Out of 311 questionnaires distributed to academic staff members, 256 (82.6%) questionnaires were returned. The return rate for both the academic staff members and postgraduate study was very good – above 80%.

4.5.2 Focus group discussion

The purpose of the focus group discussion was to obtain further insight into the scope of institutional policy practices and supplement the data not addressed by the structured questionnaire. The selection of participant is best summarized by Creswell (2009:185) by saying that “the idea behind qualitative research is to purposefully select participants that will best help the researcher to understand the research question”. The focus group discussion is seen as the best means of obtaining insight into unique circumstances that cannot be easily obtained from a survey instrument.

The focus group discussion guideline included: responsiveness of institutional policies in teaching learning, research, local and global engagement and advancement in Information Communication Technology (ICT) utilization in line with the current global demand (see Appendix B). The discussion on these issues provided the researcher with a foundation and framework of understanding the details of the empirical core of the study addressing the Ethiopian higher education policies and practices. Moreover, the data generated broadened and supplemented the quantitative data.

Each member of the focus group interviews was given a code for identification which indicated institution and date of the focus group interview. The following abbreviations (codes) were used to refer to respondents from different universities: Addis Ababa University (AAU), Bahir Dar University (BDU), Haramaya University (HRU), Hawassa University (HWU), Jimma University (JU), and Mekelle University (MU). The focus group discussions were held at Addis Ababa, Bahirdar, Haramaya, Hawassa, Jimma and Mekelle Universities (in all sampled universities). English was used in focus group discussion as English is the medium of communication in Ethiopian universities. The interviews were recorded on a digital tape recorder. The researcher facilitated the discussion and an assistant was recruited to record the discussion.

4.6 DATA ANALYSIS

The methods of data analysis depend on the nature of the study and its design. As a result there are different approaches of data analysis for different study designs. The best method of data analysis where quantitative and qualitative data are involved in one single research is the triangulation method approach (Onwuegbuzie & Teddlie, 2003) which was adopted for this study. Accordingly, condensation dimensionality of quantitative data via descriptive statistics, explanatory thematic analysis, cluster analysis and the qualitative data via exploratory thematic analysis data consolidation that deals with combining both quantitative and qualitative data to create new complementary data were employed (Onwuegbuzie & Teddlie, 2003).

The phenomenon of interest in this study - globalization and its impact on higher education policy in Ethiopia, policy practices and issues - is not easily observable but inferred from the data collected. The inference was made possible by the researcher's theoretical analysis. For this study, sources of theoretical analysis included the literature study and the continual interaction with the data throughout data collection processes. Data were subjected to a level of scrutiny that exposed both its explicit and implicit global dimensions. In this case both qualitative and quantitative data were integrated into each set of research questions.

4.6.1 Quantitative Data Analysis

Parts 1 to 5 of the questionnaire were analyzed by a designated statistician who made use of the Statistical Package for Social Sciences (SPSS 2.0) computer software. This computer programme uses cross tabulations to determine the relationship between numerous variables simultaneously.

I analysed the open-ended comments in the questionnaire. The findings are presented in chapter 5.

The quantitative data were reduced into descriptive statistics such as percentages, chi-square tests and inferential statistics such as one-way ANOVA. Accordingly the statistical techniques were employed as:

- Descriptive statistic employed for raw data summarization
- Chi-square employed for nominal data analysis
- ANOVA employed for analysis on institutional statistical differences
- Correlation matrix employed to analyse policy and the current programme mix policy effectiveness.

4.6.2 Qualitative Data Analysis

The qualitative research method is oriented towards understanding meanings and experiences. The method is therefore potentially very useful in the policy context because it can provide new insights and knowledge in higher education policy issues. Thematic analysis and content analysis are methods that are used by researchers to capture the meanings within the data. Thematic analysis was used for this study. Thematic analysis can be defined as a process of interpretation of qualitative data in order to find patterns of meaning across the data. Braun and Clarke (2006) explain that thematic analysis methods are essentially independent of theory and epistemology and can be applied across a range of theoretical and epistemological approaches.

The first step in thematic analysis involves becoming closely familiar with the data by reading and re-reading the interview transcripts. Following this close reading, initial codes were generated. This involves examining the data keeping the research questions in mind. The research questions were focused on: (a) the conceptualisation of globalisation by Ethiopian universities; (b) the responsiveness of Ethiopian university policies on teaching and learning, research and ICTs in the context of globalisation; and (b) the responsiveness of Ethiopian universities on global knowledge economy.

The next step involved searching for themes. After generating codes, the researcher clusters them into ideas that are related. All the data relevant to each theme were extracted and a system developed to ensure all the relevant data are associated first with individual codes and then with the themes. Themes were identified, defined and named. The defined themes were illustrated with reference to the transcripts. Extracts or quotes were used to capture the essence of the theme. While reading the transcripts the researcher focussed on what the participant said in relation to responsiveness of Ethiopian policies on globalisation.

4.6.3 Document analysis

The document analysis started from the inception of the review on Ethiopian higher education policies and practices. The primary focus was on recent documents updated or originating from 2001 to 2015, the present practices and the significant changes or shifts in the system of higher education sector development. The initial document analysis provided a base understanding of the factors driving changes in Ethiopian higher education system. The approach was to deduce data from documents that provide an objective rationale for policy formulation activities beyond the biases or recollections of the individuals involved in both survey and focus group data collection. The report based on the documents was seen to prove or disprove data obtained in focus group discussion via triangulation. Further, document analysis complemented and deepened understanding of the additional data obtained through the survey and focus discussions. The purpose of document analysis was to reconcile the data gathered through the focus group discussion and to enrich knowledge of the current Ethiopian universities policies and practices in line with the current global demand. Under document analysis, official documents, such as

Ethiopian higher education policies and strategies, institutional policies and strategies and reports, proclamations, statistical abstracts and relevant documents from Ethiopian higher education consultants were obtained and analyzed.

4.6.4 Data integration

Finally, a holistic approach to analysis incorporated findings from both quantitative and qualitative data. The themes for the data analyses were derived from the conceptual framework of the study that was grounded in the basic research questions. The findings of the quantitative data was described first and then supplemented by qualitative findings in the form of texts and quotes. Thematic issues and the evidence generated from the focus group discussion and document analysis were integrated with the quantitative data generated from the questionnaire with reference to the original research questions.

4.7 VALIDITY AND RELIABILITY

A pilot study was conducted to test the reliability and validity of the baseline questionnaire in other higher education institutions with equivalent status of the sample. The responses captured on the questionnaires were subjected to SPSS version 2.0 to test its reliability and to scrutinize each item in terms of internal consistency and homogeneity of the items contained in each sub-scale. Accordingly, the reliability coefficient of Cronbach Alpha was .82, which is considered acceptable. The face validity of the items of the questionnaire was checked by senior researchers in higher education where the pilot study was made. As the issues of the research are new in Ethiopia, the study is not aimed at making any generalization; rather it aimed at initiating new policy analysis in the global dimension. External validity is not the concern at this stage.

When conducting an interview, it is imperative that the validity of the research is increased by ensuring that that questions asked directly address the research objectives (Mouton, 1996). One of the key criteria to addressing the issue of trustworthiness of data collected through interviews is ensuring that the research measures or tests what is actually intended for (internal validity). The study should address what Merriam (1998) refers to as “credibility”. Polit and Beck (2012)

explain that “credibility” refers to the truth of the data or the participant views and the interpretation and representation of them by the researcher. In this study the researcher demonstrated engagement with the participants, methods of observation, and audit trails. The other strategies used to address the issue of validity and trustworthiness in qualitative data collection was addressing issues dependability, confirmability, transferability and authenticity.

Dependability is another measure that could be used to strengthen the validity data collected through interviews. It refers to the constancy of the data over similar conditions (Polit & Beck, 2012). This measure has been achieved when other researchers in the area of globalisation concur with the decision trails at each stage of the research process.

The researcher also made sure that he adhered to the principle of *confirmability* which refers to the researcher’s ability to demonstrate that the data represent the participants’ responses and not the researcher’s biases or viewpoints. In reporting the research done in this study, the researcher provided rich quotes from the participants that depict each emerging theme (Polit & Beck, 2012; Tobin & Begley, 2004).

Transferability is another important criterion to measure credibility and trustworthiness of qualitative data. It refers to findings that can be applied to other settings or groups (Polit & Beck, 2012). The researcher provided sufficient information on the participants and the research context to allow the reader to assess the findings.

The criterion of *authenticity*, which refers to the ability and extent to which the researcher expresses the feelings and emotions of the participant’s experiences in a faithful manner (Polit & Beck, 2012), is also key in enhancing the validity of qualitative study. A descriptive approach where the researcher presents the essence of experiences of participants through quotes is adopted in this research project.

A specific strategy such as triangulation has also been employed by the researcher to address the multiple principles stated above (Bazeley, 2010). For this particular study the focus group discussion data combined with the document and survey data was used as a means of identifying

potential patterns of higher education policies and practices. The analysis was linked to the theoretical literature which provided a basis for the data complementarities. Triangulation of data is crucially important for particular pieces of information which come to light. In this study the triangulation of data attempted to achieve what may be termed “development of converging lines of inquiry” (Yin, 1994:92) which is a source of internal validity.

4.8 ETHICAL REQUIREMENTS

Ethics in research deals with sets of beliefs, trustworthiness and the way procedures in carrying out the research are implemented (Hisada, 2003). The most recent revision of the APA Ethics Code (APA, 2002) includes a more protective standard to reduce deception research, prohibiting such research if it leads to pain or substantial stress or discomfort and requiring investigators to respect a participant's request to withdraw from data gathering or debriefing (Fisher, 2003). Social researchers should strive towards establishing relationships of trust with research participants, the scientific community and the public. When conflicting professional, personal, financial, legal or other interests impair the objectivity of data collection, analysis or interpretation, the validity of the research is compromised (Fisher, 2003).

This study about issues of higher education within the current globalization context analyses what is happening in Ethiopian higher education policy and is social science research. This may necessarily engage one in a discussion of a broad range of political issues, which, in turn, raises ethical issues during the research process. As the research also relates to public policy and its implementation within a political environment, the ethical steps should avoid potentially harmful conflicts of interest to ensure the objectivity of data analysis and interpretation. Impairment of objectivity can harm participants, the public, institutions, funders and the integrity of social science as a field when qualitative instruments are employed (Marshall, 2003).

In this study the researcher ensured the ethics of research by remaining honest, keeping the research information private and confidential throughout the study and ensuring protection of the rights and welfare of the participants using the following procedures. The first ethical requirement was met by obtaining ethics clearance certification from the University of South

Africa, College of Education Research Ethics Committee. Permission to conduct research was also sought from the six Ethiopian universities (see Appendix E).

Further, the researcher took the following steps to meet ethical requirements:

- The participants were informed of the purpose of the research.
- The nature of the research and how the information would be gathered and used were explained to the respondents through the consent letter as well as verbally.
- Confidentiality of information obtained in the research was maintained. Confidentiality of data recorded was guaranteed and the researcher informed the participants beforehand.
- A consent letter was given to all participants to sign as acknowledgement that they had agreed to participate in the study.
- Participants were requested not to reveal their names on questionnaires or during focus group discussions. As mentioned, codes have been used to identify participants' quotations in the findings.
- Under no circumstances were the participants forced to participate. All those who participated signed the consent form.

In terms of role representation, particularly for focus group discussion, the researcher tried to make a balance between building genuine rapport with participants and maintaining professional objectivity. During the focus group discussions, the researcher respected set boundaries for participants to safeguard their own professional reputation. The other ethical consideration that the researcher considered was related to the maintenance of confidentiality during both data collection and writing process. As the nature of the study was a combination of quantitative and qualitative approaches, the researcher was cautious in considering the objective reality of data complementarity throughout data deduction processes. Finally, the findings of this research will only be presented at academic conferences and workshops and published in appropriate academic journals.

4.9 CONCLUSION

This chapter portrayed the different research paradigm approaches with a short explanation and rationale for the choice of the research methods within different disciplines. The philosophical assumption of ontology and epistemology are the basis for the paradigm and methodological choice of any research. In this study, the pragmatist approach was preferred and explained in detail. In the light of this approach, the complementarity of instruments used in the study was articulated. Sampling techniques, instrumentation and procedures and the ethical requirements were explained. The questionnaire with the pilot test, focus group discussion and data analysis were described. The measures taken to ensure validity and reliability of the instruments, data collection and analysis were addressed. The following chapter presents the findings of the mixed method study.

CHAPTER 5

PRESENTATION OF FINDINGS

5.1 INTRODUCTION

This chapter presents and analyses empirical data pertaining to policy practices in Ethiopian universities in the context of globalisation. The findings of the quantitative and the qualitative inquiry are presented and discussed. The chapter is structured based on the following research questions:

- To what extent have universities in Ethiopia embraced the reality of globalisation?
- To what extent have Ethiopian universities responded to local knowledge market?
- What is the impact on teaching and learning, research and innovation and on ICT policies prevalent in Ethiopian universities in the context of the global economy?
- What roles do higher education policies play in the socio-economic transformation of Ethiopia, while being challenged to meet the demands made by global knowledge economy?

5.2 EXTENT TO WHICH ETHIOPIAN UNIVERSITIES EMBRACE THE REALITY OF GLOBALISATION

The composite frequency (Table 5.1) presents the findings regarding the respondents' conceptual understanding of globalisation in Ethiopia. The response pattern of respondents on individual items regarding the extent to which universities in Ethiopia embrace the reality of globalization is illustrated.

Table 5.1: Respondents' extent of understanding of realities of globalisation

Descriptions	Respondents	N	M	SD	<i>F</i> (3,543)	<i>p</i>
Conceptual understanding of the realities of globalization	Lecturer	169	3.8	0.55	9.77	0.00
	Assistant professor	64	3.64	1.01		
	Associate professor	22	4.44	0.62		
	Postgraduate students	289	3.93	0.6		
	Total	544	3.87	0.67		
Responsiveness of teaching and learning policy on global knowledge economy	Lecturer	166	3.17	0.75	2.17	0.09
	Assistant professor	64	3.01	0.93		
	Associate professor	22	2.86	0.89		
	Postgraduate students	287	3.24	0.8		
	Total	539	3.18	0.81		
Responsiveness of research and innovation policy on global knowledge economy	Lecturer	164	3.12	0.7	1.65	0.17
	Assistant professor	64	3.14	0.92		
	Associate professor	22	2.8	1.07		
	Postgraduate students	283	3.2	0.9		
	Total	533	3.15	0.85		
Responsiveness of university policies on local and global engagement	Lecturer	158	3.28	0.88	7.30	0.00
	Assistant professor	63	3.17	1.08		
	Associate professor	22	2.22	1.17		
	Postgraduate students	278	3.17	1.03		
	Total	521	3.16	1.02		
Responsiveness of university policy on graduate employment demand in the global context	Lecturer	150	2.53	0.92	2.20	0.09
	Assistant professor	64	2.31	1.11		
	Associate professor	21	1.7	1.24		
	Postgraduate students	263	2.55	1.21		
	Total	498	2.48	1.13		

* M: Mean, SD: Standard Deviation

Table 5.1 depicts that academic staff and students at the selected institutions had a good understanding of the realities of globalisation. The overall descriptive statistics on the realities of globalisation (M =3.87, SD =.67) show that academic staff and students were well aware of the realities of globalization according to the literature review on the current global discourses. The

responsiveness of the teaching and learning policy on the global knowledge economy in the selected universities did not seem satisfactory. The descriptive statistics ($M = 3.18$, $SD = 0.81$) demonstrate that all respondents rated that little or medium efforts had been made by universities to ensure that policies on teaching and learning responded to the global demands. The associate professors rated the extent to which the teaching and learning policy responded to the current global demand extremely low ($M = 2.86$ & $SD = 0.89$).

Table 5.1 further describes the responsiveness of the research and innovation policy on global knowledge demand and on local and global engagement ($M = 3.15$ & $SD = 0.87$ and $M = 3.16$ & $SD = 1.02$). The descriptive statistics depict that the responsiveness of research and innovation policy on global demand is not satisfactory. Furthermore, the associate professors' responses regarding the responsiveness of the research and innovation policy on global knowledge demand and on local and global engagement ($M = 2.80$ & $SD = 1.07$; $M = 2.22$ & $SD = 1.17$) respectively, shows that Ethiopian universities response to current globalisation demands is weaker.

In relation to the responsiveness of the university policy on graduate employment demands in the global context, the role played by Ethiopian universities with regard to graduate job placement was extremely poor, or no attempt was made at all. According to Table 5.1, the overall mean of the respondents ($M = 2.48$, $SD = 1.13$) shows that few or no attempts were made to follow up graduates and their placement at local or global level after completion of a certain level of education. In other words, there was no institutional policy to undertake tracer studies of the required workplace demands on both the local and global contexts in the respective fields or disciplines offered at universities.

Table 5.1 further shows that a statistically significant differences ($F_{(3,543)} = 9.77$, $p = 0.00$) among the respondents on the realities of the globalisation and institutional policies on local and global engagement ($F_{(3,543)} = 7.30$, $p = 0.00$). To understand these significant differences better, a post hoc analysis was undertaken as can be seen in Table 5.2 below.

Table 5.2: Analysis of respondents' difference on realities of globalisation

Dependent Variable			MD (I-J)	S.E	P
Conceptual understanding of the realities of globalization	Lecturer	Assistant professor	.15	.09	.43
		Associate professor	-.64*	.14	.00
		Postgraduate	-.13	.06	.22
	Assistant professor	Associate professor	-.80*	.16	.00
		Postgraduate	-.29*	.09	.01
		Associate professor	.51*	.14	.00
Responsiveness of teaching and learning policy on global knowledge economy	Lecturer	Assistant professor	.15	.12	.62
		Associate professor	.24	.18	.63
		Postgraduate	-.07	.07	.84
	Assistant professor	Associate professor	.08	.20	.98
		Postgraduate	-.23	.11	.24
		Associate professor	-.31	.18	.38
Responsiveness of research and innovation policy on global knowledge economy	Lecturer	Assistant professor	-.02	.12	.99
		Associate professor	.31	.19	.44
		Postgraduate	-.08	.08	.80
	Assistant professor	Associate professor	.34	.21	.45
		Postgraduate	-.05	.11	.97
		Associate professor	-.40	.18	.21
Responsiveness of university policies on local and global engagement	Lecturer	Assistant professor	.11	.14	.90
		Associate professor	1.06*	.22	.00
		Postgraduate	.11	.09	.71
	Assistant professor	Associate professor	.95*	.24	.91
		Postgraduate	.00	.13	.01
		Associate professor	-.95*	.22	.00
Responsiveness of university policy on graduate employment demand in the global context	Lecturer	Assistant professor	.21	.16	.63
		Associate professor	.32	.26	.05
		Postgraduate	-.02	.11	.99
	Assistant professor	Associate professor	.60	.28	.20
		Postgraduate	-.24	.15	.49
		Associate professor	-.35	.25	.07

*. The mean difference is significant at the 0.05 level. *. level.; MD: Mean Difference, SE: Standard Error

From the post hoc analysis computed in Table 5.2, associate professors showed statistically significant differences with other respondents in terms of their conceptual understanding of the realities of globalisation. For instance, Table 5.2 depicts that statistically, there was a significant difference between associate professors and other respondents ($MD=1.06, p=0.00$) with regard to the responsiveness of Ethiopian universities policy on local and global engagement. These differences might be the result of the respondents' background, experience and rank.

With regard to Ethiopian universities' policy responsiveness to teaching and learning; research and innovation and graduate employment, there is no statistically significant difference observed among respondents. With regard to understanding the realities of globalisation, there is a statistically significant difference between lecturers and associate professors ($MD =-.64, p= .00$), between assistant professor and associate professors ($MD =-.80, p = 0.00$) and associate professors with postgraduate students ($MD =.51, p =0.00$). The respondents' differences regarding the realities of globalisation can be ascribed to their experience either at local or global level. In all cases regarding what globalisation is all about, associate professors responded differently from the other respondents. This shows that higher education professors observed the institutional responsiveness towards global discourse and global knowledge critically in the same way. Furthermore, Table 5.3 below shows the respondents' understanding of the general impact of globalisation on Ethiopian higher education policy.

Table 5.3: Analysis of globalisation impact on higher education

		Respondents				Total	χ^2	P
		Lecturer	Assistant professor	Associate professor	Postgraduate students			
Do you think that globalisation affects Ethiopian higher education policy? [question 2.16]	Yes	123	45	20	207	395(77.5%)	6.88	0.07
	No	33	16	0	66	115(22.5%)		

Table 5.3 shows that the majority of the respondents (77.5%) believe that globalisation affects Ethiopian higher education policy. However, Table 5.3 depicts that there was no statistically significant difference ($\chi^2=6.88$, $p> 0.05$) among the respondents occupying different academic ranks. In spite of the differences observed among the respondents regarding the realities of globalisation and institutional policy responsiveness to globalisation in Table 5.2, Table 5.3 indicates that, regardless of rank, academic staff and students were aware of the impact of globalisation on Ethiopian higher education policies.

As mentioned in the review of Ethiopian higher education, the Bologna process is gaining the upper hand as part of the globalisation discourse influencing policies on higher education. Ethiopian universities are currently implementing the Bologna processes. Table 5.4 presents respondents' responses to the influence of the Bologna process in Ethiopian universities.

Table 5.4: Analysis of realities of Bologna process by respondents

		Respondents				Total	χ^2	<i>p</i>
		Lecturer	Assistant professor	Associate professor	Postgraduate			
Do you think that Bologna process has an impact on Ethiopian higher education policy? [Question 3.12]	Yes	55	35	20	141	251(50.9%)	29.67	0.01
	No	92	23	1	126	242(49.1%)		
Do you see Bologna process creating opportunities for Ethiopian higher education? [Question 3.13]	Yes	90	27	3	77	197(47.9%)	27.30	0.01
	No	52	26	15	121	214(52.1%)		

Table 5.4 shows two distinct features observed concerning the impact of the Bologna process on Ethiopian universities. There was a statistically significant difference ($\chi^2 = 29.674$, $p = 0.01$) between the respondents regarding the impact of the Bologna process on the current global

discourse. This shows that academic staff and postgraduate students do not share a clear picture of the process in the context of current global demands.

On the other hand, the majority of the respondents (52.1%) did not see the Bologna process creating an opportunity for Ethiopian higher education to engage in global discourse. These findings demonstrate that Ethiopian universities are practising the Bologna process without a sound understanding of whether the process would create opportunities for Ethiopian higher education policies to respond to the global demands. This is why there is a statistically significant difference regarding the responsiveness of the Bologna process ($\chi^2=29.67$, $p = 0.01$) and the opportunities it may create ($\chi^2 = 27.30$, $p =0.01$) for universities to respond to the global knowledge demands. One can clearly understand why academics criticised the notion that the Bologna process plays a vital role in standardising Ethiopian higher education. However, the Ethiopian government and the Ministry of Education see the Bologna process as the only means of standardising the Ethiopian higher education curriculum.

Table 5.5: Descriptive summary on realities of globalisation by respondents

Ranks of Respondents	Mean & Skewness	Policy Area Descriptions				
		Realities of globalisation	Teaching learning	Research & innovation	Local and global engagement	Graduate employment demand
Lecturer	M	3.82	3.19	3.10	3.30	2.53
	Skew	-1.15	-.40	-.02	-.34	.19
Ass.Prof	M	3.66	3.02	3.17	3.18	2.33
	Skew	-.68	.08	-.08	-.33	.20
Ass.Prof	M	4.51	2.94	2.82	2.21	1.70
	Skew	-.77	.06	.23	.86	1.59
Post. Grad.St	M	3.95	3.22	3.20	3.17	2.55
	Skew	-.46	-.10	-.30	-.37	.20
Grand Total	M	3.90	3.17	3.15	3.17	2.48
	Skew	-.81	-.16	-.18	-.36	.24

*The more negatively skewed mean, the more optimistic to the given feature; the more positively skewed, the more pessimistic to the given feature

Table 5.5 shows that the associate professors were more optimistic about globalisation ($M = 4.51$, $Skew = -.77$) than the other respondents. Table 5-5 also shows that associate professors were less optimistic about their institutional policy responsiveness in the area of teaching and learning, research and innovation and policies that relate to local and global engagement. On the other hand, lecturers and postgraduate students were more optimistic regarding their institutional policy responsiveness to teaching and learning, research and innovation and local and global engagement in the context of globalisation. However, all the respondents were pessimistic about university responsiveness policy on graduate employment demands as seen from a global perspective (See Table 5.5).

From Table 5.5, one can see how far apart the respondents' views were with regard to the responsiveness of teaching and learning, research and innovation and local and global engagement to current global knowledge demands. The gap between associate professors and lecturers and postgraduate students was well-articulated. From the analyses shown in Tables 5.1 to Table 5.5, it can be concluded that respondents had different views about the policy responsiveness of their institution in line with the realities of globalisation. The analyses done were based on the rank of the respondents, exposure to a conceptual understanding of globalization and their institutional responsiveness seems nonexistent.

In the preceding sections, the analyses regarding the realities of globalisation were made per respondents' academic rank and experience. In all the cases regarding the analyses, institutional policy responsiveness to the realities of globalisation, statistically significant differences were observed between associate professors and other respondents. The following section is devoted to the analyses of institutional policy responsiveness at a particular institutional level.

Table 5.6: Descriptive summary of realities of globalisation at institutional level

Universities	Mean & Skewness	Policy Area Descriptions				
		Conceptual Understanding of Globalisation	Teaching and Learning	Research and Innovation	Local and global engagement	Graduate employment and demand assessment
Addis Ababa	M	3.93	2.94	2.67	2.71	2.09
	Skew	-0.94	0.36	0.42	0.19	0.78
Bahir Dar	M	3.7	3.17	3.26	3.29	2.84
	Skew	-0.59	-0.08	0.14	-0.27	0.22
Haramaya	M	3.89	3.45	3.37	3.47	2.46
	Skew	-0.46	-0.45	-0.22	-0.47	0.31
Hawassa	M	3.98	2.88	3.02	2.86	2.21
	Skew	-0.16	0.05	-0.14	-0.09	0.33
Jimma	M	3.81	3.48	3.31	3.45	2.89
	Skew	-0.89	-0.38	-0.16	-0.16	0.05
Mekelle	M	3.96	3.19	3.25	3.15	2.41
	Skew	-0.01	-0.24	-0.17	-0.47	0.22
Overall mean	M	3.87	3.13	3.15	3.16	2.48
& skewness	Skew	-0.75	-0.14	-0.19	-0.38	0.24

*The more negatively skewed mean, the more optimistic to the given feature; the more positively skewed, the more pessimistic to the given feature

Table 5.6 shows that all the sampled universities shared a similar and optimistic view (M =3.87, Skew = -.75) about the realities of globalisation. The sampled universities had similar policy practices and they were pessimistic about graduate employment demand (M = 2.48, skew =.24). However, differences were observed with regard to institutional policies on teaching and learning, research and innovation and local and global engagement. For instance, Table 5.6 shows that the institutional policy responsiveness in teaching and learning in the case of the Haramaya University (M =3.45, Skew= -.45), and the Jimma University (M = 3.48, Skew = -.48) was better for teaching and learning compared to other universities. With regard to research and innovation, local and global engagement, all the universities, except the Addis Ababa University were less optimistic about their institutional policy responsiveness to globalisation. The Addis Ababa University was more pessimistic with regard to its institutional policy responsiveness on research and innovation and on local and global engagements compared to the other universities.

Table 5.7: Analysis of institutional policies regarding realities of globalisation

Universities	N	M	SD	$F_{(5,543)}$	P
Addis Ababa	94	3.93	1.05		
Bahir Dar	94	3.70	.56		
Haramaya	103	3.89	.58	2.33	0.09
Hawassa	76	3.98	.58		
Jimma	96	3.80	.54		
Mekelle	81	3.96	.45		
Total	544	3.87	.67		

The results in Table 5.7 depicts that, at the institutional level, the realities of globalisation are similarly understood. The overall mean and standard deviation ($M = 3.87$ & $SD = .67$) in Table 5.7 shows that all the institutions agreed on the realities of globalisation discourses. Furthermore, the results of the ANOVA, ($F_{(5,543)} = 2.330$, $p > 0.05$), showed that there was no statistically significant difference between the sampled universities regarding the realities of globalisation. However, this result was obtained from the crude data of the overall institution; care must be taken while making conclusions about the findings. For instance, differences were observed regarding the conceptual understanding of globalisation among respondents at individual level. In this regard Table 5-1 and Table 5-2 clearly showed significant differences between associate professors and the other respondents.

Table 5.8: Analysis of institutional response regarding impact of globalisation

		Universities						Total	χ^2	p
		AAU	BDU	HRU	HWU	JU	MU			
Do you think that	Yes	77	56	79	55	68	60	395(77.5%)		
globalisation affects	No	15	27	18	14	23	18	115(22.5%)	8.28	0.14
Ethiopian higher										
education policy?										
[question 2.16]										

*. The mean difference is significant at $p = 0.05$

From Table 5.8, the majority of the sampled universities (77.5%) agree that globalisation affects Ethiopian higher education policy; only 22.5% believe that the impact of globalisation does not affect the higher education policy in Ethiopia. This is why no statistically significant difference ($\chi^2=8.28$, $p =.14$) was observed as the majority of institutions felt that Ethiopian higher education cannot escape global discourses since the majority of respondents in these institutions had been exposed to global policy discourses. Table 5.8 depicts that the conceptual understanding of globalisation features meant that institutions knew about the relationship between higher education and the impact of globalisation.

To validate the quantitative data on the conceptual understanding of the realities of globalisation and its impact on higher education policies, the views and perceptions of respondents in sampled universities are presented as follows:

In fact globalisation, from theory and principle point of view, delimits the capacity of nation-states. The sole responsibility and accountability in their legal policy development, and decision-making capacity is influenced by globalisation policies. Globalisation rather forces nation-states to exercise new policies and rules underpinning globalisation discourses. As a result, the impact of globalisation affects the Ethiopian higher education policies and practices (JU-21/7/2015).

The point made by the above comment confirms one of the principles of globalisation that requires public universities to provide services with the intent of making a profit. Consequently, the government will have to face the challenge of fulfilling its legal mandate of operating within the prescribed policy framework. Furthermore, the participant raised the following points:

In the last two decades, there were several foreign universities flourishing in Ethiopia with the diversified and commercialized mode of delivery in the second and third-year degree programmes. As a result, many officers received tuition in their offices. However, this mode of delivery or teaching and learning is not prescribed in Ethiopian higher education policies and existing legal

proclamation. In reality this shows how globalisation affects legal framework of one's higher education institutions. (HRU- 6/5/2015).

The opinion above shows that globalisation could affect one's country's higher education policy potentially in the area of the economic development support system, governance and mode of education delivery that has a bearing on curriculum reformation. Different literature presupposes that global policy discourses mitigate the internationalisation principles of higher education as cross-border education with a different mode of delivery. However, Ethiopian higher education has not yet started commercialising education under the umbrella of internationalisation in response to globalisation. From the focus group discussions carried out with regard to the conceptual understanding of globalisation at one of the sampled universities, a participant remarked:

Theoretically we know globalisation and its impacts; practically it is difficult to say we are in global dimension in our daily activities. We as teachers of higher education are expected to deal a lot with globalisation. Among us there are staff members with qualifications in areas of business, and also geography and international relation studies, but we are not teaching our students about the impact of globalisation. The important thing to be noted is that teaching about the impact of globalisation does not need subject specialization. Everybody at higher education should know it. Globalisation discourse, under the umbrella of liberalism, can be extended in education through policy harmonization. As a result, our education is subjected to fragmented policy adjustments, with different consultants in the Ethiopian Ministry of Education. Especially in the last 15 years the curriculum of our higher education policy is not stable. Different consultants came with odd and new ideas of one country; then some modification, for instance, structural modification like years of study for degree programmes directed from the governing body without the consensus of academicians. Directly or indirectly our higher education are experiencing the influence of globalisation. (HRU - 6/5/2015).

At almost all the sampled universities, there is a conceptual understanding of the features of globalisation and its impact. The opportunity gained from the global discourse and challenges to cope with globalization were also well understood among the participants in this study. The main problem is its practicality to engage with current global demands. In this regard, Ethiopian higher education's mid-term, long-term or strategic plans do not address how to make Ethiopian higher education global.

The document analysis indicated that all the Ethiopian universities were adopting their five-year plan based on the Ethiopian government's Growth and Transformation Plan (GTP) under the education sector. The Ethiopian government's Growth and Transformation Plan focuses on the long-term national development holistically. However, in the case of higher education, the Ministry of Education together with higher education officers and advisors plan how to internationalise Ethiopian universities in view of the current global knowledge convergence.

However, from the official document analyses undertaken and the strategic plan of the sampled universities consulted, an exhaustive elaboration of student enrollment ration and duplication programmes was made. The documents also gave an exhaustive description of the excellence of mission and vision statements with different slogans. On the other hand, internationalization, as a response to globalisation, was linked directly with the excellence of universities documented in specific programmes. When one university excels in teaching and learning and research and innovation, its power to collaborate with international higher education is high and it obtains a global reputation. In this case, because of its geographical position, the Addis Ababa University located in the capital of the country, has international collaboration and is globally recognised. Foreign students arrive with their parents for political diplomacy and are admitted to the university and this encourages cultural integration among university students.

At almost all the sampled Ethiopian universities, it was difficult to get an exhaustive strategic plan of internationalisation that responds to globalisation. In a few cases, such as at the Addis Ababa and Jimma Universities, a five-year strategic plan involving international research collaboration is found. However, these plans had shallow indicators. The strategic plan of each university focussed on recruiting domestic students and teachers only. The plan did not address

the recruitment of international students and academics. This shows the inconsistency of the strategic role planning of Ethiopian universities in terms of global and higher education demands. Universities lag behind with regard to addressing the internationalisation of their teaching and learning, research and their engagement with their local demands in their strategic planning formulation. Furthermore, a participant said:

Our strategic plan is politically influenced. It lacks technical skill, and it is more conceptual. We are forced to implement what is designed by some group of political personnel. Experts with global knowledge dimension do not participate in the formulation of the plan. For instance the graduate mixing policy of students in 30:70 proportions is forced by the ruling party without consensus reached by academicians. The strategy behind the graduate mixing policy was said to increase the graduate in science and technology; to fulfill the manpower required in technology area. However, its local and global dimension in quality and standard required is not clearly articulated. This is why the questioning of strategic planning with the view of making inputs is not acceptable during the formulation process. This is why we say our Universities strategic, and policy formulation are politically influenced. Our strategic plan is not designed within framework of higher education internationalisation processes (BDU-13/6/2015).

Ethiopian higher education policy endorsement in international collaboration and international policy integration for mutual benefit in response to the current global discourse is at its infant stage. The respondent's view shows that the impact of globalisation and its responsive policies and strategies have not yet been articulated in higher education strategic planning at both ministerial level, the Ethiopian Ministry of Education, and at institutional levels.

5.3 EXTENT OF ETHIOPIAN UNIVERSITIES RESPONDING TO LOCAL AND GLOBAL KNOWLEDGE

The impact of globalisation discourse is making institutions interdependent with regard to one another. The interdependency of institutions is enhanced by the linkage of human capital and technology. Higher education has a role to play in producing global citizens that promote balanced development according to local and global demands. In global dynamics, human capital proceeds technological diffusion and technological catch up. In this case, highly educated graduates from higher education institutions in one country determine the pace of that country's development by creating both a balanced local and global knowledge demand and knowledge societies. This, in turn, tends to look at the local and global responsiveness of one's country's higher education in teaching and learning process. In the current global knowledge economy, the success of higher education policy of one country is measured and explained in terms of: attracting and retaining high-quality teaching and learning, involvement of international students and professors with relevant curricula, integration of research and dissemination of knowledge, scientific communication, the involvement of international scholars in curriculum formulation and teaching through e-learning programmes.

In developing countries, such as Ethiopia, its higher education policy has to be revitalized from enrollment to learning outcomes. In the current global knowledge convergences, universities must engage in international activities with relevant curriculum integration that allows student mobility, a flexible curriculum and engagement in local and global development priorities. In order to make teaching and learning policies responsive, higher education institutions have to introduce internationalisation innovation in academic programmes that are also in line with globalisation. The internationalisation of higher education favours academic mobility and well-developed education systems that foster global knowledge production. It creates an opportunity for academicians with regard to knowledge commercialisation that profits higher education.

From these global perspectives the responsiveness of Ethiopian universities to teaching and learning is evaluated. The following section presents the extent of the policy responsiveness of Ethiopian universities' teaching and learning processes in the context of the local and global

knowledge systems. The overall statistical data of Table 5.9 shows that the extent of institutional policy responsiveness in teaching and learning in the context of local and global knowledge is somewhat skeptical (M=3.18, SD =.81). Moreover, Table 5.9 shows a statistically significant difference ($F_{(5,534)} = 9.26, p=00$) between universities regarding teaching and learning in the current global knowledge convergences. Specifically the Addis Ababa and Hawassa Universities (M = 2.94; SD = .91 and M = 2.81, SD. = .81) respectively, show the poor extent of institutional policy responsiveness towards teaching and learning global knowledge convergences. In order to show institutional differences, a post hoc analysis that was computed is shown in Table 5.10

Table 5.10: Analysis of institutional policy differences policy in teaching and learning in the context of local and knowledge convergence

University		MD (I-J)	SE	P
AAU	BDU	-0.23	0.12	0.54
	HRU	-.51*	0.11	0.00
	HWU	0.14	0.12	0.93
	JU	-.47*	0.11	0.00
	MU	-0.23	0.12	0.58
BDU	HRU	-0.27	0.11	0.31
	HWU	0.37	0.12	0.09
	JU	-0.24	0.11	0.51
	MU	-0.01	0.12	0.97
HRU	HWU	.65*	0.12	0.01
	JU	0.04	0.11	0.98
	MU	0.27	0.12	0.35
HWU	JU	-.61*	0.12	0.01
	MU	-0.37	0.12	0.12
JU	MU	0.24	0.12	0.56

*. The mean difference is significant at the 0.05 level. *. level.; MD: Mean Difference; SE :Standard Error

* AAU: Addis Ababa University, BDU :Bahir Dar University, HRU: Haramaya University, HWU:HawassaUniversity, JU:Jimma University, MU: Mekelle University

Table 5.9: Analysis of institutional policy responsiveness in teaching and learning

Universities	N	M	SD	$F_{(5,534)}$	P
Addis Ababa	92	2.94	0.91		
Bahir Dar	92	3.17	0.75		
Haramaya	102	3.45	0.77	9.26	0.00
Hawassa	76	2.81	0.81		
Jimma	96	3.41	0.73		
Mekelle	81	3.17	0.75		
Total	539	3.18	0.81		

From the post hoc analysis of Table 5.10, institutional policy differences were observed between the Addis Ababa and Haramaya Universities ($MD = -.51$; $p = .0$) ; between the Addis Ababa and Jimma Universities ($MD = -.47$, $p= 0.00$) ; between the Haramaya and Hawassa Universities ($MD = 65$, $p = 0.01$) and between the Hawassa and Jimma Universities ($MD = -.61$, $p = 0.01$). One important thing to be noted is that the Addis Ababa and Haramaya Universities are the oldest higher education institutions among the Ethiopian universities. However, the institutional responsiveness regarding teaching and learning at the Addis Ababa and Hawassa Universities was not in line with the rest of the institutions. In this regard, Figure 5.1 shows the institutional differences in teaching and learning policy viability at institutional level.

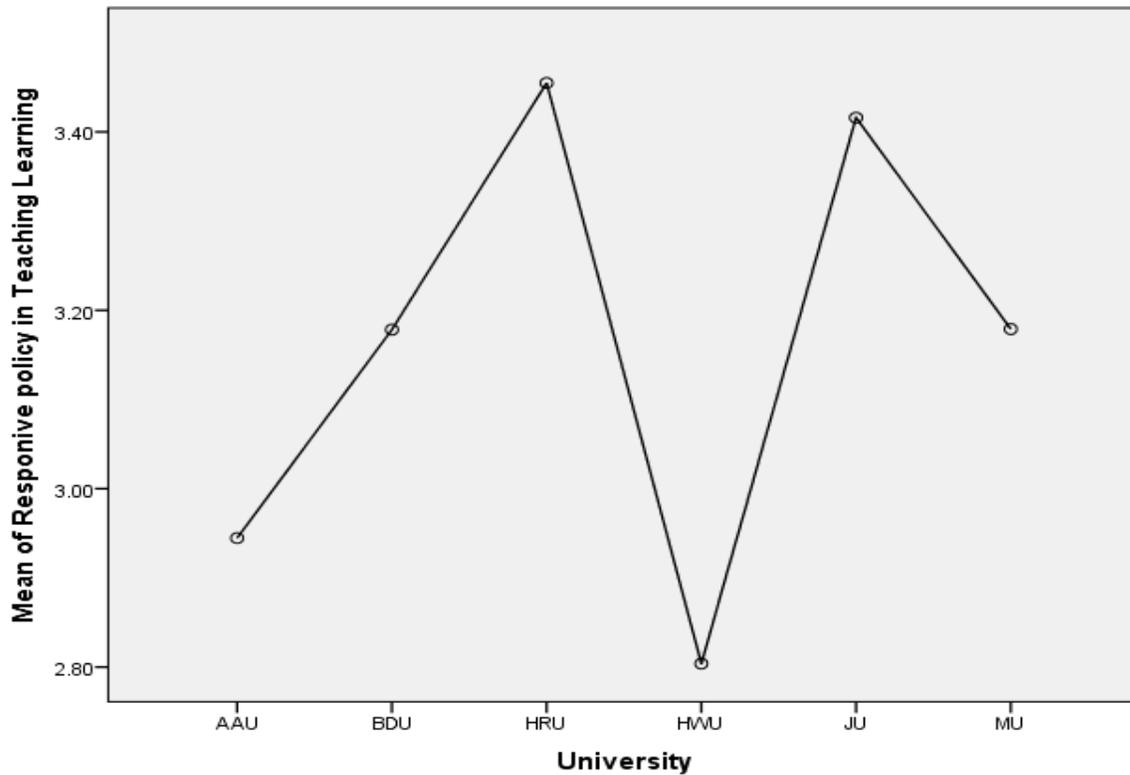


Figure 5- 1: Mean Plot of Responsive Policy in Teaching Learning

The mean plot of Figure 5.1 shows the institutional differences among sampled universities. According to Figure 5.1, the Haramaya and Jimma Universities had viable teaching and learning policies, while the Hawassa and Addis Ababa Universities' policy viability is somewhat challenging. However, it is difficult to judge from this single observation, as all Ethiopian higher education institutions followed similar processes of teaching and learning, namely, the current Bologna process.

Table 5-11: Analysis of the Bologna process at Ethiopian universities

		Universities						Total	χ^2	p
		AAU	BDU	HRU	HWU	JU	MU			
Do you think that Bologna process has an impact on current global knowledge convergence? [question 3.14]	Yes	25	60	43	38	63	37	266(54%)	45.12	0.00
	No	65	20	50	33	19	40	227(46%)		
Is Bologna process an opportunity for Ethiopian higher education? [question 3.13]	Yes	27	50	27	56	29	38	227(55%)	18.53	0.00
	No	58	13	40	14	28	31	184(45%)		

According to Table 5.11, the Bologna process was not perceived similarly at all the sampled universities. For instance, even though the majority of the institutions (54%) agreed on the responsiveness of Bologna process to the current global knowledge convergence, the majority of respondents from the Addis Ababa, Haramaya and Mekelle Universities perceived it differently. Moreover, Table 5.11 further shows a statistically significant difference ($\chi^2 = 42.12$, $p = 0.00$) between the sampled universities regarding the responsiveness of the Bologna process on global knowledge convergence.

Table 5.11 also demonstrates the institutional differences regarding the opportunities afforded by the Bologna process in Ethiopian higher education teaching and learning and the impact it had on local and global knowledge production in Ethiopian universities. However, the majority, with the exception of the Addis Ababa and Haramaya Universities, believed that the Bologna process was seen as an opportunity for Ethiopian higher education, in supporting the internationalisation of teaching and learning that contributes to local and global knowledge. Furthermore, the discussions done on the Bologna process with a participant of focus groups at the sampled universities reflected the following:

We feel that Bologna process is another form of globalisation; at the policy level it encourages cooperation and scholastic exchange opportunities and similar accreditation. This also subjects structural change in the mode of delivery and

curriculum reformation. On the other hand, it ignores local reality, the way higher education experience its respective backgrounds. While we are exercising globalisation since the last five years, we are in a state of role confusion, with the introduction of modular approaches informed by the Bologna process (AAU- 4/7/2015).

The views of respondents reveal that the Bologna process implemented in Ethiopian higher education ignores the local realities.

Table 5-12: Analysis of higher education ranking in Ethiopian universities

		University						Total	χ^2	p
		AAU	BDU	HRU	HWU	JU	MU			
Did your institution get regional ranking of the top 100 higher education institutions in Africa in the last three years (2011-2014)? [question 3.15]	Yes	81	18	43	27	47	18	234(54%)	14.48	0.02
	No	7	45	40	38	15	53	198(46%)		
Did your institution get global ranking of the top 100 higher education institutions in the World in the last three years (2011-2014)?[question 3.16]	Yes	10	3	7	2	18	5	45(10%)	4.73	0.71
	No	81	66	75	62	46	67	397(90%)		

One of the indicators of global higher education is higher education ranking. Higher education ranking can be done at national, regional and global level. In this regard, Table 5.12 shows that the Addis Ababa and Jimma Universities are among the universities that received their regional ranking in the last four consecutive years, whereas the majority of the universities were not ranked among the first top 100 universities in Africa. In the case of global rankings, the Ethiopian higher education did not get a ranking among the first top 100 universities at global level. In this regard, no statistically significant difference ($\chi^2 = 4.73$, $p = .71$) was observed at the sampled universities. It means that these universities are not expecting to be among the top 100 universities at global level. Furthermore, the issues of higher education ranking in the case of Ethiopian higher education are summarised as follows by a participant:

Yet, we are not familiar with higher education ranking. Most of the time, we read higher education ranking from text books, internet and at certain higher education forums. In case of Ethiopia, since the last five years the Ethiopian ministry of education declaring that Jimma University got the first ranking position among Ethiopian Universities. It should be noted that the instrument by which the Ethiopian ministry of education evaluate Ethiopian universities ranking is not clear and somewhat confusing. There is no justification that the adopted criteria for Ethiopian higher education ranking are reliable or not. Who developed it, we don't know. According to certain website information, in the last three years, at Africa level, Addis Ababa and Jimma Universities are ranked among the top 100 African Universities. In this case Addis Ababa Universities are among the first top 50 African Universities, whereas Jimma University is below the rank of Addis Ababa University. The reality to be noted is that the rank of Addis Ababa University 20 years ago was among the first top 10 African Universities, Ipersonally read from one article. Today why Addis Ababa University falls among the top 50th rank since 2010 can raise another research question. (AAU - 4 /7/2015).

Accordingly, there is no clarity about higher education ranking. The criteria of higher education ranking in the current global ranking competition are not in place at all Ethiopian universities. On the other hand, the national higher education ranking criteria set by Ethiopian Ministry of Education is not acceptable to participants who participated in focus groups. One participant stated:

Different literatures show that the two oldest and established Universities; Addis Ababa and Haramaya Universities are known as distinguished African Universities. From the recent global web of science website, Addis Ababa and Haramaya Universities are the known universities in Ethiopia in general, and Haramaya is known for its knowledge contribution in agricultural research among African universities. However, the criteria for higher education ranking are confusing us. Today, in all cases, from staff diversification, rank and

quality, and knowledge contribution we believe that Addis Ababa and Haramaya Universities can get upper hand among the top 100 universities in Africa. We don't expect both at global level. In reality we teach only the discipline we do have specialty, most of our senior staff members if asked about higher education ranking, you cannot get the clear picture and importance of higher education ranking, why and how. (HWU-12/5/2015).

Higher education ranking in terms of the current global demands is in its infancy in Ethiopia. Most participants are confused about how the ranking of higher education is computed. It signifies that they do not know the current status of their universities in teaching and learning, research and local and global engagements. On the other hand, the criteria set for the regional and national higher education ranking do not enjoy university or academic staff approval.

The literature showed that the other dimension of ranking higher education relied on the knowledge contribution made by that institution through research and innovation. Today, knowledge sellers and producers in higher educations are those who invest more in research and innovation. In the global arena, research universities are becoming knowledge producers and sellers. At the same time, comprehensive teaching and research universities with responsive policies in research and innovation are also competitive knowledge producers in the current global knowledge economy.

In most of the focus group discussions conducted, globalisation was seen as an opportunity; even if a few reported it as a challenge which eroded the state sovereignty and culture. The participants at each university demonstrated similarities and differences with regard to their view of responsive policies in teaching and learning. In particular, the curriculum reform as a result of the Bologna process was observed as both a challenge and as an opportunity. Most participants at the sampled universities reported that it was better to have a diversified curriculum at one university since the current global policy made demands on universities to produce globalised citizens.

On the contrary, in the global context, the participants were questioned about the domestic students' university placement, which was confined to their birthplace close to the location of the universities. Students had a narrow outlook because of their limited exposure to other cultures. It limited their understanding of national unity as well as global integrity. It is important to note one point raised by a participant:

Teachers of Ethiopian higher education institutions are today narrowing their thinking to extreme localization, even claiming to their own clan only. It also perpetuates disharmony among students, and student unity is not observed. We ourselves are producing non globalized, narrow minded citizen. This urges to revisit our higher education admission and administration policies. (HWU - 12/5/2015).

In sum, all the selected universities believe that globalisation is an opportunity for graduates, in terms of job opportunities, social and political awareness and to establish global integrity. Only an extremely limited number of Ethiopian universities managed to get a good regional ranking (Addis Ababa and Jimma Universities were ranked in the first 100 top universities in Africa in the last five consecutive years). This shows the limited global knowledge share prevalent in Ethiopia. As observed in this study, some academic staff members were not familiar with the higher education global rankings and why it was important to rank universities at regional and global levels. Some participants were not aware of their respective institutional ranking at regional level and in Africa particularly. This is a demonstration of the fact that academic staff at Ethiopian universities do not acknowledge the higher education ranking. On the other hand, it shows the localization of Ethiopian universities that narrowed their staff's global thinking.

Official documents from the Ethiopian Ministry of Education show that the Jimma University was attempting to attract international students and staff for research collaboration and short term training to secure research funds. This was perceived as best practice: Jimma University was making a difference among Ethiopian universities and had received a regional ranking. The new teaching and learning policy formulation on curriculum standardisation and competency with regard to Ethiopian higher education is linked to the Bologna process. However, a participant at

one university remarked about the non-applicability of the Bologna process and stated the following:

The current Ethiopian universities teaching and learning approach, the Bologna process, encourages student mobility. However, there is no system policy, or responsive policy in place to attract international students. The problem is that, we started Bologna process without clear understanding of the policy of Bologna. It was given to us from the Ethiopian Ministry of Education to convert the former credit hour, Cr.hr grading system to the European Credit Transfer System, ECTS, which in our case today. Now we are playing the game of grade conversion, not the actual Bologna process. To make Bologna Process plausible in Ethiopian universities in teaching and learning the process, the science of Bologna process must be understood by implementers, and the academic staff of universities. (HWU-12/5/2015).

It is clear that Ethiopian universities appreciate the Bologna process for regional and global integrity. However, the challenge is the way it is endorsed without consensus among the implementers. If the Bologna process is implemented effectively, it will be an opportunity for Ethiopian universities to strive for internationalisation to match current global demand. All the sampled universities believed that Bologna process encouraged staff and student mobility that ensured international teaching. One participant viewed the applicability of the Bologna process in Ethiopian higher education in the context of local and global demands as follows:

Even though we are practicing Bologna process, there is no standard and flexible admission policy put in place to attract international students. Even there is no initiation among Ethiopian universities to promote global context under the umbrella of Bologna. In Europe, the Bologna Process is attracting international students across the globe. In the case of Ethiopia, when observed at a glance, student mobility and flexible curriculum within the same country has a long way to go. Why because no clear policy guidelines in place. (HRU-6/5/2015).

Another participant recommendeds that “*curriculum development requires an international dimension that attracts global students*”. One of the internationalisation measurements of higher education is its curriculum reputability, student scholarship and mobility, international staff recruitment and exchange programmes. However, from the observations and discussions with participants from the sampled Ethiopian universities, realising the intention of globalising Ethiopian higher education through internationalisation is lagging behind. The only approach so far attempted was the adoption of Bologna process. However, the academic staff of the sampled universities were negative about the way Bologna process was being adopted.

According to the responses received, the Bologna process by its nature aims to standardise European higher education through uniform qualification and accreditations processes. It takes into consideration the nature of European higher education development and economic contexts. However, in the Ethiopian case, the adoption process took place without common consensus around assessment of higher education contexts, the status of academic resources and qualified academic staff who could play a role in measuring competency based education outcomes. As a result, the endorsement of the Bologna process became a vague policy imposed on Ethiopian universities.

One conclusion to be drawn is that almost all respondents perceived the Bologna Process to be a form of global process. Its approach is appreciated with regard to its standardisation of higher education under one policy umbrella as is happening in Europe. The study participants also perceived the Bologna process as an instrument which responds to the current global knowledge convergences.

In terms of international students and staff recruitment, all the participants agreed that there was no responsive policy for international students and staff recruitment. Extremely few students from neighboring countries were admitted at the Addis Ababa and Harames, Jimi and Micelle Universities. These students were not admitted on the basis of institutional policies of student recruitment; rather they are admitted on the basis of bi-lateral government agreement with the intention of securing political support. Some expatriate lecturers, particularly those from India, were recruited in some higher education institutions in Ethiopia to fill the human resource gaps. However, the recruitment of expatriate lecturers from India did not rely on a responsive

institutional policy; it was rather effected because of university officers' individual agreements between presidents and academic vice-presidents of the recruited universities. As a result, universities in Ethiopia lack the integration of international and local professors in teaching and learning spaces.

Regarding internationalisation of knowledge systems in teaching and learning and research, challenges are observed in postgraduate study programmes. One participant has the following to say:

The challenge observed in established universities is that the masters and doctoral level education delivery still traditional. The curriculum designed for postgraduate programme is not evaluated at international level and lack international visibility. There is no staff and student exchange on scholarship basis. There is no opportunity for international professors to visit as a lecturer or supervisor. The qualification and academic rank of staff members engaged in teaching and supervision for doctoral students are not satisfactory. Fresh PhD graduate holders are assigned for thesis supervision. As a result, it takes five to six years for them to complete doctoral study programmes. Furthermore teaching and learning delivery systems are traditional, which entertain routine engagements, it does not encourage innovation, and then it lacks internationality (AAU- 4/7/2015).

Most official documents supported the idea that there was a lack of internalization of knowledge systems in Ethiopian university programmes. The Ethiopian Ministry of Education officially criticised universities that tried to engage internationally in the postgraduate programmes as a waste of time. Internationalisation enhances global teaching and learning approaches that develop a broader view in global research and outreach activities for students and staff engaged in the programme. Moreover, the low level of technology such as limited internet availability for communication with other international universities, searching for research grants, scholarship applications and publications were some of the problems that postgraduate students in Ethiopian

universities experience. Because of this and other factors, most Ethiopian students admitted to postgraduate programmes prefer to study abroad rather than at their home universities.

In short, the competitiveness of Ethiopian universities in postgraduate education delivery and internationally acceptance needs to be revisited. Issues around policy viability which suits international alliances that support global knowledge share need to be addressed. The government's official documents confirm that because of the expansion policy in higher education since 2005, the quality in higher education deteriorated and postgraduate admissions remained below the workplace demands (Teshome, 2007). This, in turn, created a shortage of local manpower for the newly established universities.

5.3.1 Programme Diversification and Expansion Policy

In order to realize programme diversification and expansion policy of Ethiopian higher education, official documents at Ethiopian Ministry of Education and sample universities were analysed. Within the last five years (2010 – 2014), the enrollment and level of academic programme diversification was seen as evidence that expansion policy is going on. The proceeding section was devoted to issues around expansion policy and programme diversification. In the following section, the programme diversification is analysed on the statistical data secured at national level by the Ethiopian Ministry of Education for the last five years (2010 to 2014), This includes the Ethiopian Ministry of Education Annual Education Abstract (2014) and the Ethiopian Higher Education Consortium Bulletin of 2014 and sampled university registrar office documents.

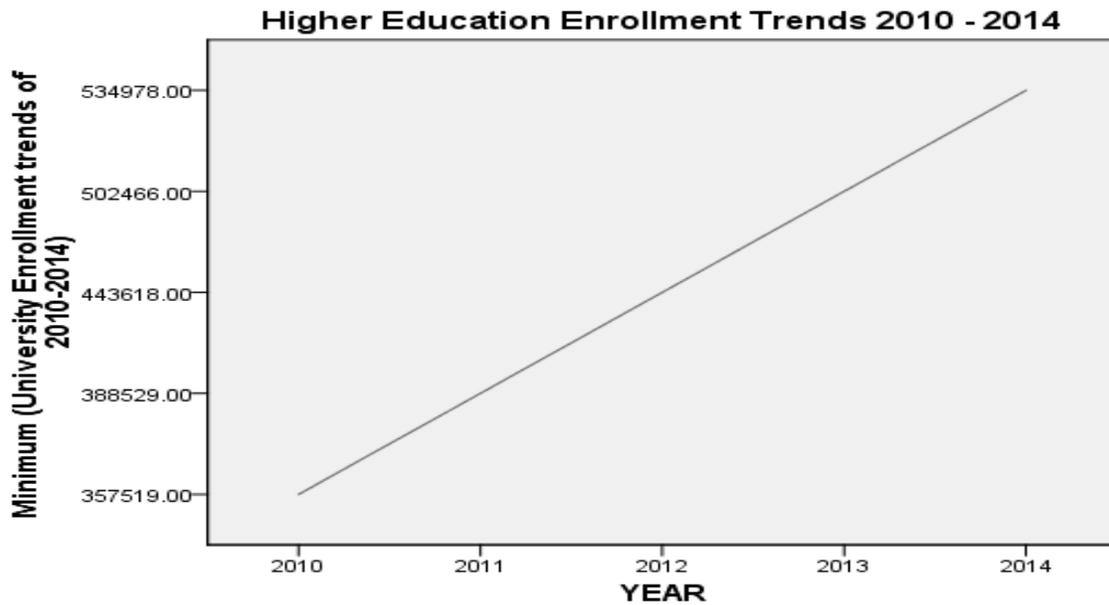


Figure 5.2: Ethiopian Higher Education Enrollment Trend 2010-2014

Source: Ethiopian Ministry of Education Annual Education Abstract (2014)

Figure 5.2 shows the quantitative expansion of enrollment between 2010 and 2014. The figure also shows the rapid increase of enrollment at a rate of 50 % (177,459 students' enrollment) in five years. This result shows the quantitative expansion of Ethiopian public universities. The increment of student enrollment is because of the establishment of nine new universities, known as the third generation universities, during the last five years.

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Table 5.13: Higher education enrolment programme trends of 2010- 2014

Year	Undergraduate	Postgraduate		Total
		Masters	PhD	
2010	344,107	12,621	791	357,519
2011	369,254	18,486	789	388,529
2012	418,965	22,804	1,849	443,618
2013	474,198	25,103	3,165	502,466
2014	505,569	26,117	3,292	534,978
%	94.5	4.90	0.60	

Source: Ethiopian Ministry of Education Annual Education Abstract (2014)

Table 5.13 illustrates the proportion of students' enrollment by level of the academic programme. According to Table 5-13, 94.5% enrolled for undergraduate programmes, 4.9% in Master's programmes and 0.6% in Ph.D programmes. In other words only 5.5% enrolled in postgraduate programmes. The trend in enrollment for undergraduate programmes increased by 13% from 2011 to 2012 whereas it increased by 46.5% in 2011, 23.4% in 2012, 10.1% in 2013, and 4.4% in 2014 for the master's programmes respectively. These trends show that the rate of enrolment at master's level fluctuates with decreasing proportion every year. The same trends are observed in the case of Ph.D programme enrollments. This shows that an enrollment trend of the postgraduate programme is not proportional to undergraduate enrolment.

Table 5.13 indicates that the proportion of enrolment for masters' and Ph.D programmes was insignificant compared to undergraduate programmes. The data in Table 5.13 show that the masters' programme, when compared to the undergraduate programme, experiences challenges in producing highly qualified graduates who could contribute to knowledge production and innovation. This shows that programme diversification with regard to high-level training such as Ph.D programmes is still lagging behind, and policy makers need to address this shortcoming. For a more illustrative explanation, Figure 5.3 below shows the trends of postgraduate enrollment.

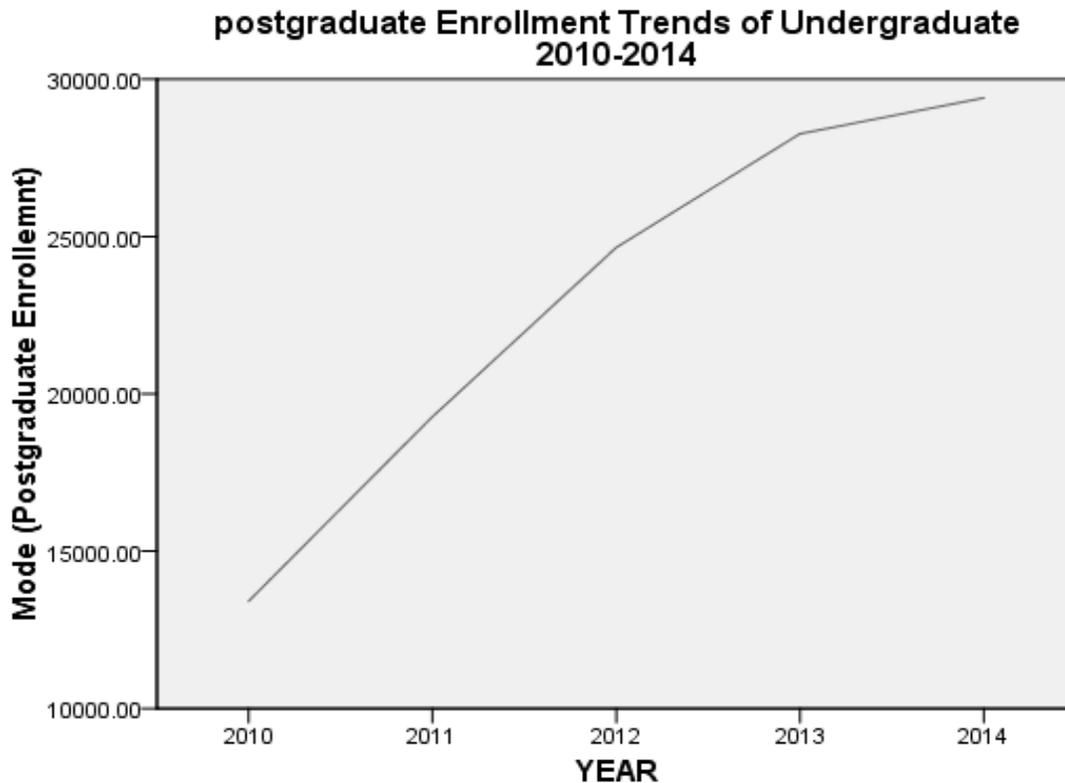


Figure 5- 3: Postgraduate Enrollment at National Level 2010 - 2014

Source: Ethiopian Ministry of Education Annual Education Abstract (2014)

Figure 5.3 demonstrates the enrollment of postgraduate students for the last five consecutive years (2010-2014) revealing that enrollment of postgraduate students increased in the first three consecutive years (2010-2012). It increased slightly during the last two years (2013 to 2014). However, when compared with the total enrollment ratio at national level, the postgraduate enrollment was not proportional to the rate at which total student enrollment was growing over the last five years. From the total enrollment of 534, 978, only 5.5% (29,409) enrolled in postgraduate programmes, whereas 94.5(505,569) students were in the undergraduate programmes. In this regard, Ethiopian higher education postgraduate programmediversification is still not on the right track in producing highly skillful manpower globally at the knowledge generation level.

One of the very recent policies of Ethiopian higher education is the graduate mix policy intended to realize the proportion of 70:30 student enrollment at Ethiopian universities in science-engineering and technology and the social sciences and the humanities respectively. Figure 5.4 shows the actual science-engineering and technology student enrollment during the last five years of 2010 to 2014.

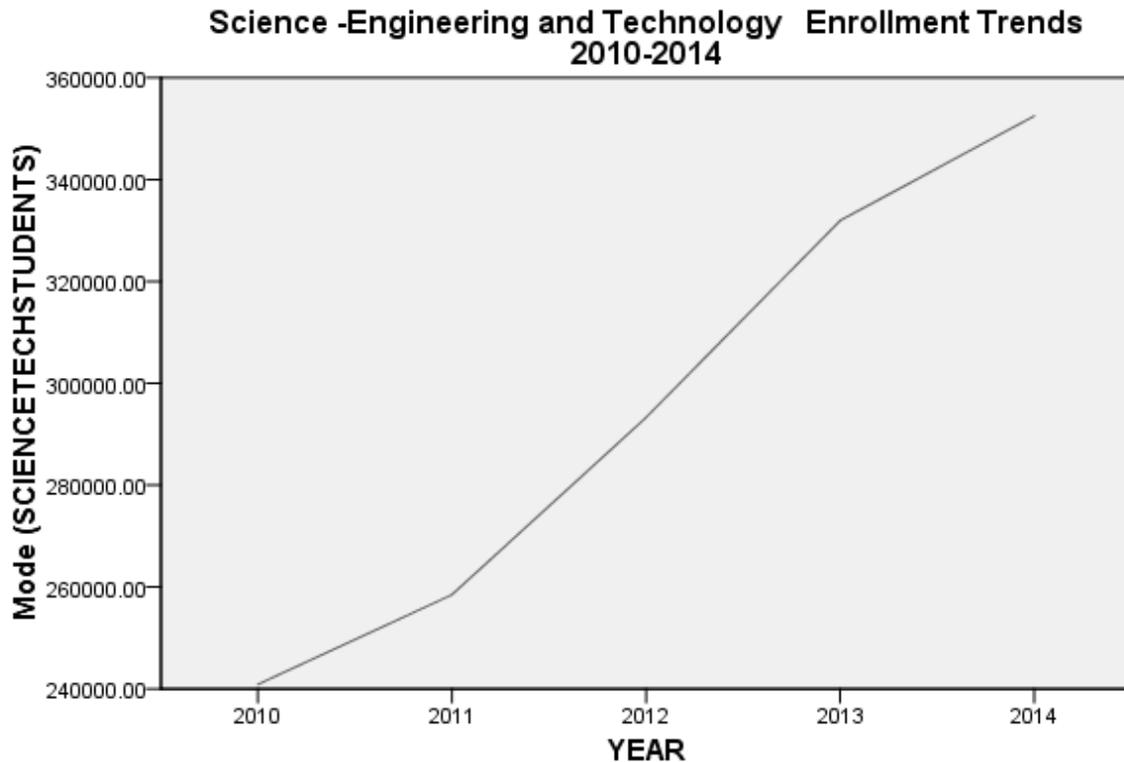


Figure 5.4: Trends of Science-Engineering Technology Enrollment at National Level 2010 - 2014

Source: Ethiopian Ministry of Education Annual Education Abstract (2014)

Figure 5.4 depicts 374,485 students enrolled in science-engineering and technology streams from 2010 to 2014. That is from the total student enrollment of 534,978 in 2010 to 2014; 70% (374,485) of students enrolled in science-engineering and technology; while the rest, 30 % (160,493) enrolled in social and humanity disciplines. Figure 5.4 shows the enrollment trends in science–engineering technology slightly increased from 2010 to 2011, sharply increased from

2011 to 2013 and increased slightly from 2013 to 2014. The overall average enrollment in science–engineering technology increased by 20-25% per year that resulted in an increment of science and technology students by 124,221 from the baseline year to 2014 within the last five consecutive years. This essentially fulfilled the graduate mix policy of 70:30 student admissions to higher education to satisfy the manpower gap in science and technology of the country.

The other dimension of programme diversification policy is academic staff development with training and recruitments including expatriate staff. Academic staff development has relied on higher education expansion policies since 2005 following the establishment of thirteen universities as second generation universities, and the establishment of nine universities as third generation universities. In order to satisfy the manpower demanded by these universities, staff diversification and development policy needed to be implemented. Figure 5.5 below shows the trends of academic staff development in 2010 to 2014.

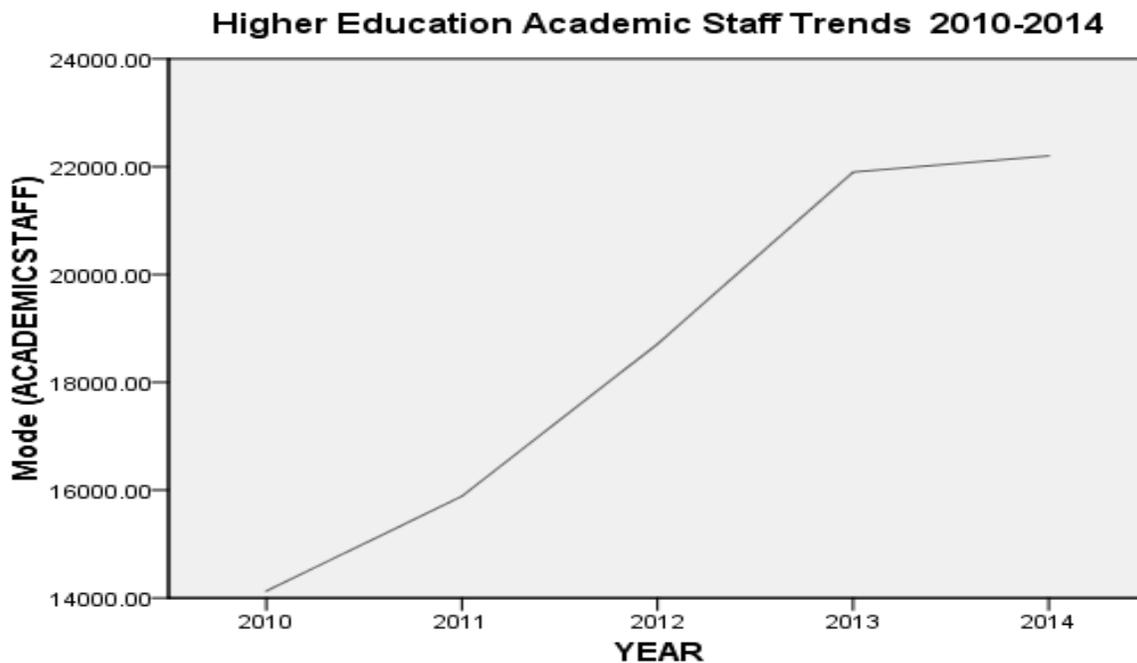


Figure 5.5: Higher education academic staff development trend at national level 2010-2014

Source: Ethiopian Higher Education Consortium (EHEC) Workshop Bulletin. (2014)

Figure 5.5 shows that academic staff development in the first three years (2010 to 2012) increased sharply, while during the last two years (2013 to 2014) increased slightly. However, when compared with the sizes of students' enrollment and programme diversification at the national level, the proportion of academic staff development implementation looked good and progressive with regard to getting the intended policies realised.

According to Figure 5.5, about 22,000 academic staff were engaged in teaching and learning at 32 Ethiopian universities that enrolled 534,978 students in different academic programmes at a ratio of one academic staff to 25 students. This is a good proportion. However, there is a challenge of staff qualification by programme and academic rank meeting the required standard in higher education engagement in teaching and learning and research activities.

Table 5.14: Correlations matrix of programme diversification at national level of annual education abstract for 2010 to 2014

Pearson Correlation	Total Enrollment	Sci. – Engi & Techn. Enrollment	Master' s programme enrollment	PhD Programme enrollment	Ethiopian staff development	Expatriate staff development
Total Enrollment	1	.978**	.849*	0.181	-.689	-.039
Sci. –Engi & Techn. Enrollment	.978**	1	.543*	0.084	-.678	-.050
Master's programme enrollment	.849*	.543*	1	.217	-.859	.137
PhD Programme enrollment	0.181	0.084	.217	1	-.614	-.075
Ethiopian staff development	-.689	-.678	-.859	-.614	1	-.120
Expatriate staff development	-.039	-.050	.137	-.075	-.120	1

***.* Correlation is significant at the 0.01 level (2-tailed), *** Correlation is significant at the 0.05 level (2-tailed).

Source: Ethiopian Ministry of Education Annual Education Abstract (2014)

Table 5.14 shows the programme diversification and graduate mix policy of Ethiopian higher education. According to Table 5.14 attempts made in science-engineering and technology graduate mix policy achieved its objectives as strongly significant positive relationship ($r=0.978$, $p<0.01$) is observed with the total enrollment. There is also strongly significant positive

relationship ($r=0.849$, $p<0.01$) between total enrollment and masters programme enrollment and slightly significant relationship ($r=0.543$, $p<0.01$) between science–engineering and technology enrollment with master’s programme enrollment. On the other hand, there is no significant positive relationship between programme diversification and the graduate mix policy of academic staff development at Ph.D. level and expatriate staff development.

The correlation matrix of Table 5.14 shows that the total enrollment trend for 2010 to 2014 in Ethiopian universities clearly met the graduate mix policy that made up the proportion of science–technology and engineering enrollment with a 70% and for others, a 30% proportion. On the other hand, the policy premises in diversifying academic staff quality via a postgraduate programme at masters and doctoral level and expatriate recruitment show no statistically significant correlation. This situation, in fact, forces policymakers to design alternative policies to bring the staff qualifications in line with the extra enrollment trends of Ethiopian higher education.

In the previous sections, the data analysed were based on the statistics obtained from the Ethiopian Ministry of Education for the last five year (2010 -2014). The next section illustrates the empirical data in programme diversification obtained from the sampled universities registrar office.

Table 5.15: Enrollment and academic staff proportions of sampled universities

Universities	Undergraduate	Postgraduate	Total Enrollment	Ethiopian Staff	Expatriate Staff	Total Academic Staff
Addis Ababa	43,635	8,235	51,870	2235	143	2378
Bahir Dar	24,031	1,981	26,012	1247	40	1287
Haramaya	25,758	3,270	29,028	1275	1203	2478
Hawassa	28,863	2,420	31,283	984	67	1051
Jimma	38,924	2,857	41,781	1282	82	1364
Mekelle	23,271	1,696	24,967	1566	8	1574
Total	184,482	20,459	204,941	8,589	1,543	10,132
	90%	15%		85%	15%	

Source: Addis Ababa university Registrar office (2014); Enrollment statistics by programme. Addis Ababa University Press, Addis Ababa. Bahir Dar University Registrar Office (2014); Haramaya University Registrar Office (2014); Hawassa University Strategic Plan (2014); Jimma University Registrar Office (2014); Mekelle University Registrar Office (2014).

All the sampled universities were considered to be established and well-organised universities. However, Table 5.15 shows that the Addis Ababa University is the largest university with regard to postgraduate enrollments followed by the Haramaya University. Bahir Dar, Mekelle, Hawassa and Jimma universities' capacity to enroll postgraduate students is extremely limited. Thus, large numbers of postgraduate students were placed at the Addis Ababa University.

Table 5.15 also shows that Addis Ababa and Haramaya Universities are the largest universities in terms of academic staff. Addis Ababa University employs a large number of both undergraduate and postgraduate students, while the Haramaya University has a better proportional enrollment of postgraduate students next to the Addis Ababa University that, in turn, requires proportional number of academic staff with relation to the students' enrollment figures. According to Table 5.15, 85% of the academic staff was Ethiopians while 15% were expatriate staff. Proportionally, Haramaya university had the most expatriate staff of all the sampled universities. Haramaya University is the largest university engaged with a diversified postgraduate programme. Mekelle University is the employer with the lowest number of expatriate staff among the sampled universities.

From the internationalisation perspective, the recruitment of international staff members helps to promote global knowledge share. In the case of Ethiopian universities, most expatriates were drawn from the India. For instance, 98% of the Haramaya University expatriate staff members were recruited in India. This recruitment also raises the question why expatriates from one country are preferred in this university.

Table 5- 16: Academic staff qualification of sampled universities

Universities	Masters	PhD	Others	Total
Addis Ababa	1,658	528	649	2,835
Bahir Dar	863	81	413	1,357
Haramaya	1258	112	621	1,991
Hawassa	312	57	625	994
Jimma	732	61	596	1,389
Mekelle	809	87	670	1,566
Total	5632 (55.6%)	926 (9.1%)	3574 (35.3%)	10,132

Source: Addis Ababa university Registrar office (2014); Enrollment statistics by programme. Addis Ababa University Press, Addis Ababa. Bahir Dar University Registrar Office (2014); Haramaya University Registrar Office (2014); Hawassa University Strategic Plan (2014); Jimma University Registrar Office (2014); Mekelle University Registrar Office (2014).

Table 5.16 shows that 55.6 % of full-time sampled university academic staff members hold a qualification at master’s degree level, while 9.1 % had PhDs and 35.5 % were below the level of masters and Ph.D. academic qualifications. This, in turn, affected the quality of teaching and learning and the quality of graduates produced at the completion of the qualification. It is difficult to keep thepace of quality education, especially at universities such as the Addis Ababa and Haramaya Universities where there were relatively large numbers of postgraduate students. The Addis Ababa and Haramaya Universities had a better staff composition with regard to academic qualifications compared to other universities. At PhD level, apart from the Addis Ababa University, the other universities are below the standard required for higher education institutions to engage in research and scholastic teaching and learning processes.

The staff qualities and experience are indicators of quality teaching and learning and research and innovation. However, the Ethiopian universities are still suffering from a shortage of manpower with regard to the required level of qualifications and experience that could contribute towards the internationalisation of Ethiopian higher education that, in turn, would respond to global knowledge convergences.

In order to study the national programme diversification and graduate mix policy in the six sampled Ethiopian universities, the practices of programme diversification and the graduate mix correlation matrix were computed.

Table 5 -17: Correlations matrix of programme diversification of sample universities

Pearson Correlation	Total enrollment	Science & Technology enrollment	Master's programme enrollment	PhD programme enrollment	Ethiopian staff development	Expatriate staff development
Total enrollment	1	.965**	-.565	-.189	.634	-.160
Science and Technology enrollment	.965**	1	.543*	0.384	-.687	-.050
Master's programme	-.565	.543*	1	0.217	-.838	.137
PhD programme	-.189	0.384	0.217	1	-.659	-.075
Ethiopian staff development	.634	-.687	-.838	-.659	1	-.055
Expatriate staffs development	-.160	-.050	.137	-.075	-.055	1

*. Correlation is significant at the 0.05 level (2-tailed), ** Correlation is significant at the 0.01 level (2-tailed).

Source: Addis Ababa university Registrar office (2014); Enrollment statistics by programme. Addis Ababa University Press, Addis Ababa. Bahir Dar University Registrar Office (2014); Haramaya University Registrar Office (2014); Hawassa University Strategic Plan (2014); Jimma University Registrar Office (2014); Mekelle University Registrar Office (2014)

Table 5.17 shows that there was a strongly significant relationship between science-engineering and technology enrollment with the total student enrollment ($r=.965$, $p<0.01$), and the slightly significant relationship ($r=0.543$, $p<0.01$) between science-engineering and technology enrollment with master's programme enrollment. With regard to the other dimension of programme diversification and staff development, there was no statistically significant relationship between the staff development programme with the total student intake capacity of the universities. This confirms that universities were fully engaged in improving the enrollment ratio in keeping with the graduate mix policy, while the diversified academic staff development that predicted the quality of teaching and learning was ignored.

Furthermore, the analysis made regarding programme diversification and staff development in the sampled universities in Table 5.17 and at the national level of enrollment ratio in Table 5.14 confirmed that both sets of data were completely complementary. In both analyses, a statistically strong correlation was observed in the graduate mix policy of 70:30 student enrollments with the total enrollment figures. Other dimensions, such as staff development in terms of both Ethiopian and expatriate recruitment and capacity building, still require attention to keep the quality of teaching and learning in line with the current global knowledge competitive climate.

5.3.2 Internationalisation Practices in Teaching and Learning

One of the global factors of higher education is cross-border education services. In this regard, no official documents were on rationalising the cross-border education services were located. Academic programme exchange for international alliance and cross-cultural skill developments of universities are elements of internationalisation of higher education. In this regards, no efforts had been made by Ethiopian universities to establish exchange programmes between themselves and international universities. No study shows the branches and affiliated offices of Ethiopian universities in other countries, even within their region, Africa in this case. The most critical hindrance for Ethiopian universities in responding to the global demand was expressed by respondents as follows:

Participants of the study addressed that that the curriculum of Ethiopian higher education is designed without global knowledge demand assessments. It is rather locally political driven and imposed by some experts on Ethiopian Ministry of Education. In addition, inadequate funding for curriculum revision requires international consultants, limit capacity to retain the high level caliber of staff members. For standard teaching and learning to deliver for both domestic and international students, are major factors hindering Ethiopian higher education reputability at international level (AAU- 4/7/2015

According to a research report by Tefera and Knight (2008), the brain drain and the turnover of high caliber academics persists in Ethiopian higher education. The government official

documents of the Ethiopian Ministry of Education, in addition, indicated funding constraints; limited budgets for Ethiopian higher education secured only from the recurrent budget secured from the Ethiopian Ministry of Finance and Economic Development are problematic. It is true that the World Bank and International Fund Monitoring (IFM) do not support the development of Ethiopian higher education; instead they encourage general education. This can be seen as a challenge for the global competence of Ethiopian higher education.

From the document analysis done at sampled universities, it transpired that the Ethiopian universities were attempting to practice internationalisation based on individual efforts. The most advantaged university, the Addis Ababa University, because of its geographical location, was given an opportunity to enter into a memorandum of understanding with many international institutes, academic and research affinities and the European Union. Among the collaboration entered were programmes for study abroad for academic staff with eastern and southern African social study alliances, regional networks with the Khartoum University and a linkage with an international school of business in Chinese. Moreover, for the international political landscape diplomacy the contribution made by the Addis Ababa University representing the Ethiopian government, is indispensable.

On the other hand, the international linkage of the Jimma University in health and agriculture with European universities for study abroad and research collaboration, the alliance of Mekelle and Hawassa University, with the Norwegian government fund scheme for agricultural development, the linkage of the Haramaya University with the University of the Netherlands for staff development and research collaboration, are some of the contributions made in internationalising their higher education. Attempts made by the Jimma University in postgraduate programme scholarship in collaboration with research partners in the United States and Europe in material science and engineering programme and the alliance of Bahir Dar University of Ethiopia and Cornell University to deliver of Masters of Professional Studies (MPS) programme in international agriculture and rural development endorsed in 2007, shows a step forward for Ethiopian higher education in internationalising their curriculum.

Ethiopian universities, although they have no consolidated policy documents to respond to the current global discourse, are indirectly responding to globalisation through internationalisation. At the consolidated policy level, the Bologna process implemented under the supervision of the Ethiopian Ministry of Education in all public higher education is seen as one step by Ethiopian universities to internationalise their curriculum. The attempts made at making the Bologna policy more visible in Ethiopian higher education were appreciated. However, it is not possible to say that Ethiopian universities were implementing Bologna policy. Since the Bologna policy is not only limited to credit transfer, it includes flexibility learning paths, curriculum harmonization, knowledge convergence and recognition of studies at European level. Academics criticise the reformation carried out in Ethiopian universities with regard to implementing the Bologna process; its implementation has been conducted without critical evaluation of the national context and the former learning paths.

5.3.3 Information and Communication Technology Challenges

Information and communication Technology (ICT) today is one of the best instruments in converging global knowledge dimensions under one umbrella. It facilitates knowledge dissemination at a reliable cost within a fraction of seconds. Thus, the establishment of ICT in higher education facilitates knowledge networking on the globe. Therefore, ICT becomes the basic infrastructure for the internationalisation of higher education. Higher education institutions with advanced ICT infrastructure are potentially capable enough to internationalise their programmes, as well as their research and innovation. It is known that higher education in developed countries is dominating by reaching other countries via cross-border education with the aid of ICT. However, at African Universities, with the exception of South African universities, few ICT utilities are observed in teaching and learning at global scales.

In the case of Ethiopian higher education, the importance of ICT development is well understood at government and institutional levels. According to official documents, universities are investing a relatively large amount of the budget on the development of ICT infrastructure. However, the utility of ICT for global knowledge sharing is not well thought among staff and officers of Ethiopian universities. On the other hand, the networking system of Ethiopian universities was at

its infant age. As a result, the linkage between teaching and learning, research and innovation with other international universities is insignificant. Notably, attempts made by the Jimma University with the advancement in ICT with application in teaching and learning, library digitalisation, and tele-conferencing in health science with international staff are encouraging. The participants of the focus groups, with the exception of the Jimma University expressed their views as follows:

We use ICT for internet services, such as course material survey, individual scholarship search only. The internet service is offered under limited capacity; sometimes it is blocked for a week. The ICT infrastructure development is not in line with the demanding staff and students' number. We are still teaching in a traditional way. No special classroom is supported with ICT instruction available yet. It is difficult to say Universities in Ethiopia are utilizing ICT at all. (AAU-4/7/2015).

Moreover, postgraduate students are disadvantaged by the lack of ICT utilities to facilitate their teaching and learning, research and investigation of new theories and principles with the aid of ICT. A participant expressed the following view:

As postgraduate students, we are expected to update new theories, principles from new text books, journal articles with good reputability exploring the different website. While our universities ICT, in most cases do not function, we are searching ICT from private business centers with high cost per minutes. Most of the time we complain with problems associated with ICT, the responses given by my university officials are out of realistic. The reality is that the ICT structure is not in line with teaching and learning, and research and innovation; rather it is designed by nonacademic staff with irrelevant knowledge of ICT infrastructure. The main ICT problem in Ethiopian Universities emanated from inadequate internal structures and lack of knowledge in ICT infrastructure. (AAU- 4/7/2015).

In support of the above view, Mulu (2012) shows that Ethiopian universities are not properly utilising ICT, even for classroom instruction. Almost students of Ethiopian universities are dependent on printed textbooks. This is an indication of poor ICT development in Ethiopian universities. However, Ethiopian universities are investing in ICT development; the underlying problem behind is associated with the skilled workforce required to utilise the developed ICT infrastructure for practical application.

5.3.4 The current university governance status

One of the instruments for higher education to measure the current global policy demands is decentralization governance that promotes staff cooperation engagement in teaching and learning, research and innovation and local and global development activities. Regarding Ethiopian universities governance, respondents have raised similar views. A participant said as follows:

For the last 10years, we are engaged in different reform tools. These tools are Business Process Re-engineering (BPR), Balanced Score Card (BSC) and the like. There are also other instruments, yet not clearly named, in our case, most of the academic staff call them political instruments. At the very inception, the reform tools were expected to support decentralized governance in harmony with academic governance. In order to implement these reform tools, purely political party members are assigned as a University President and Vice Presidents. The pool of the university administration system, from presidents to college dean, even in some universities up to department heads and course leaders are drawn from political parties. Ruling party political member overwhelm the universities, regardless of their academic rank. These bodies are busy with the implementation reform tools. However, no success is observed in employing the reform tools. Most of them are not applicable to academic disciplines. When explored, in some literature these instruments are well applicable in business industries than academic institutions. (AAU-4/7/2015).

According to official documents Ethiopian higher education is implementing Business Process Re-engineering (BPR) in line with decentralization policies that facilitate teaching and learning, research and local engagements. Furthermore, the intention of BPR is to make governance reform according to the current Ethiopian higher education proclamation 650/2009. However, respondents are not comfortable with the reform tools and assignment of university administration. Furthermore, participants reflected their views on university governance tools and performance measurements typically taking Addis Ababa University as an example.

Addis Ababa University is known with its reputable academic staff at regional and international level. All the curriculum of other universities, institutional policies and procedures are adopted from Addis Ababa University. Policy advisors and international consultants are drawn from Addis Ababa University. However, the Ethiopian government, with its reform tool ranks, Addis Ababa University as inefficient among other Universities in Ethiopia. However, the regional ranking of Higher Education, in Africa, put Addis Ababa University first from Ethiopian Universities, and among the top 50 African Universities. (JU - 21/7/2015).

In today's global arena, higher education internationalisation not only refers to the curriculum and staff and international student exchange and scholarship offerings, but it is also about the provision of new governance that entertains global academic leadership. Higher education with global-minded leadership acquires more global opportunities in internationalising the university. However, respondents' reflection on their university governance is not in line with the current higher education internationalisation principles. The arguments raised by the respondents depict that university governance and reform tools reduce the autonomy of academic reputability of individual and institutional rights.

The Ethiopian Ministry of Education employs reform tools to evaluate university governance and academic leadership. The Ethiopian university governance is highly centralized Within the Ministry of Education. This shows that the Ethiopian university governance is not in line with the

current decentralization policy and global university governance demands. Thus, it needs restructuring in terms of governance and leadership of higher education in line with the current globalisation policy that permit academic competition for knowledge production, which, in turn, contributes to local and global development.

5.3.5 Policy responsiveness in local and global employment of graduates

The success of one global university is measured by its quality education, programme quality and opportunity for graduate employment. In this regard assessing global and local manpower demands and designing reliable academic programmes are the responsibilities of universities. On the other hand, the programme quality should be assessed through a tracer study that shows where graduates are, indicates the graduates' profile and their placement in the local and global job market. Graduate profile in this study means the number of students achieving identifiable knowledge competency at local and global placements. Further, the analysis of evidence of the impact on students' knowledge, attitudes, beliefs, skills and careers from global perspectives is a measure of graduate profile responding to the current global knowledge convergences

Table 5.18: Analysis of institutional policy responsiveness of graduate employment

Universities	N	M	SD	$F_{(5,498)}$	<i>P</i>
Addis Ababa	89	2.29	1.28	1.13	0.69
Bahir Dar	83	2.34	0.97		
Haramaya	95	2.46	1.03		
Hawassa	76	2.2	1.07		
Jimma	78	2.39	1.01		
Mekelle	77	2.41	1.19		
Total	498	2.43	1.13		

Table 5.18 shows that all sampled universities do not have a responsive policy regarding graduate employment demand assessment. In all cases, no attempts have been made in graduate placement policy analysis at the institution level. There is no statistically significant difference observed between sampled universities regarding graduate employment demand assessment policy ($F_{(5,498)} = 1.13$, $p = .69$). The result confirms that institutions are not assessing their programme quality and market demand at local and global levels that determines employment opportunities for graduates. This is an indication that Ethiopian universities are engaged in programme duplication and enrolment ration without making critical analyses of desired academic programme quality and diversity of disciplines for local and global demands.

The response of the participants regarding graduate employment policy was as follows:

We simply teach and graduate our students. We follow their academic completion according to their years of study and curriculum of their respective disciplines. So far no institutions are engaged in tracer study with clear policy direction to follow our graduate profile, whether employed at local or global working environment. Actually, we are not expecting graduates of Ethiopian universities employment at global level competition. Different research report shows that the poor qualities of Ethiopian universities are limiting the competency of graduates at global level.
(MU 05/03/2015).

Curriculum internationalisation is associated with students and staff global knowledge advancement and global employment opportunities. This can be realized when the institutional policy framework operates under the global dimension.

A critical issue is that the graduate mix policy of Ethiopian higher education needs ratification of employment opportunities. According to the graduate mix policy of 70:30, the majority of graduates are from science-engineering and technology disciplines. The current enrollment statistics show more than 375,000 students graduate every five years with about 20% increment in science-engineering and technology every year. Here the question of employment may be raised as where to employ the graduates and what are the opportunities, local or global, to absorb the graduates. In order to answer these questions, Ethiopian universities are expected to assess

manpower demands at a local and global level in all programmes of respective disciplines. Furthermore, universities programme quality evaluation should be done to benchmark local and global standard programme quality assessment.

Moreover, an internationalised curriculum, regardless of discipline, should prepare students for engagement in both locally and globally informed research and innovation activities. Higher education institution needs to conduct tracer studies to follow where their graduates employed after graduation. This leads to revising their curriculum in line with global and local employment demands. Local and global employment opportunities demand quality graduate students with relevant knowledge. The study made by Mulu (2012) indicates that the quality of the programme, the quality of academic staff running the programme and the quality of courses or curricula within a local and global dimension determine the quality of graduates who can compete locally and globally for employment. The Ethiopian government policy option behind the expansion of higher education is producing creating new jobs rather than seeking jobs. Regarding a policy synopsis participant stated:

Of course, when observed at glance, it is a pretty described policy. However, the curricula of our university is not producing creative graduate. As a first reason, the government of Ethiopia is in need of mass higher education for political stability. The current curriculum we are applying is of Bologna process as an apparent view, actually not. The curriculum was not standardised based on local and global quality completion. On the other hand the quality of academic staff engaged in teaching and learning and research and innovation is also another problem. More than 65% of academic staff is below the standard required for university staff lecturer position. Especially, the second and third generation universities, more than 95% academic staff are below the required standard for teaching universities as delineated by Ethiopian higher education proclamation number 650/2009. For instance, the 70% expected graduate of science –engineering and technologies are of no practical laboratory attachments, no industry based teaching project development as engineering students, rather they are surfaced with full of

theoretical abstracts during their stay in the universities. Thus, expecting creative citizen from the current logic seems a some what paradox to the practical situations (HRU-6/5/2015).

The reflection of the above is directly associated with the quality of graduates and creating suitable jobs and reflects a pessimistic view based on the government policy premises. According to the participants, the quality of inputs and process such as quality of curriculum from global and local dimensions and quality of staff and infrastructure adversely affect the quality of graduates in meeting the policy premises of creating new jobs rather than searching for employment. The other critical issues are mass higher education without quality infrastructure, quality of academic staff, the standard curriculum and the employment crisis.

On the other hand, because of globalisation, policy, better higher education institutions are flourishing in Ethiopia with better curricula and conducive teaching and learning models. Furthermore, quality graduates from different countries are also flourishing in Ethiopia and securing high salaried employment in private companies. For instance, the MIDROCK Company in Ethiopia is currently recruiting technicians from China and India. On the other hand, Ethiopian universities are producing 70% graduates annually in the science and engineering fields. The realistic views of respondents on the quality of Ethiopian universities in breaking into local and global competition are paradoxical. In order to keep the competitiveness of graduates, a lot is expected to be done by Ethiopian universities.

The response to the actors in globalising Ethiopian higher education in Table 5.19 shows levels regarding the extent to which the following actors played a role in standardizing Ethiopian higher education to global level.

Table 5-19: Analysis of actors in globalising Ethiopian higher education

Actors in Higher Education	Level of Globalisation	Universities							χ^2
		AAU	BDU	HRU	HWU	JU	MU	Total	
Ethiopian Ministry of Education	VL	7.9%	10.3%	4.3%	12.3%	2.2%	5.3%	6.9%	47.12**
	L	16.9%	17.2%	5.3%	13.7%	12.0%	10.7%	12.5%	
	M	14.6%	23.0%	22.3%	21.9%	29.3%	32.0%	23.7%	
	G	16.9%	33.3%	26.6%	17.8%	28.3%	30.7%	25.7%	
	VG	43.8%	16.1%	41.5%	34.2%	28.3%	21.3%	31.2%	
Higher Education Strategic Centre	VL	7.7%	12.5%	5.0%	13.7%	4.3%	3.9%	7.6%	52.33**
	L	12.1%	19.3%	6.9%	12.3%	10.6%	9.1%	11.6%	
	M	17.6%	26.1%	21.8%	16.4%	28.7%	24.7%	22.7%	
	G	18.7%	26.1%	35.6%	30.1%	38.3%	44.2%	32.1%	
	VG	44.0%	15.9%	30.7%	27.4%	18.1%	18.2%	26.0%	
Donor organizations and advisors and UNESCO, Ethiopia Centre	VL	7.9%	12.2%	5.1%	11.1%	3.2%	5.1%	7.3%	43.76**
	L	13.5%	17.8%	7.1%	15.3%	12.8%	14.1%	13.2%	
	M	19.1%	18.9%	25.3%	22.2%	28.7%	28.2%	23.8%	
	G	19.1%	31.1%	35.4%	31.9%	41.5%	38.5%	33.0%	
	VG	40.4%	20.0%	27.3%	19.4%	13.8%	14.1%	22.8%	
Higher Education Chief officers-the presidents	VL	11.0%	12.4%	6.1%	15.1%	6.3%	7.7%	9.5%	42.01**
	L	18.7%	18.0%	8.1%	16.4%	14.7%	14.1%	14.9%	
	M	11.0%	30.3%	28.3%	26.0%	29.5%	21.8%	24.6%	
	G	25.3%	27.0%	33.3%	16.4%	35.8%	35.9%	29.3%	
	VG	34.1%	12.4%	24.2%	26.0%	13.7%	20.5%	21.7%	
Higher Education Relevance and Quality Assurance	VL	8.8%	11.1%	5.0%	9.7%	4.3%	5.1%	7.2%	50.25**
	L	19.8%	17.8%	8.0%	16.7%	12.8%	19.2%	15.4%	
	M	13.2%	21.1%	37.0%	26.4%	30.9%	26.9%	26.1%	
	G	24.2%	35.6%	34.0%	23.6%	27.7%	34.6%	30.1%	
	VG	34.1%	14.4%	16.0%	23.6%	24.5%	14.1%	21.1%	
The Ethiopian Higher Education Academic staff	VL	8.7%	7.7%	7.9%	13.9%	4.3%	7.7%	8.1%	21.19*
	L	18.5%	23.1%	17.8%	15.3%	18.1%	21.8%	19.1%	
	M	13.0%	25.3%	23.8%	33.3%	33.0%	24.4%	25.2%	
	G	23.9%	31.9%	37.6%	19.4%	25.5%	37.2%	29.5%	
	VG	35.9%	12.1%	12.9%	18.1%	19.1%	9.0%	18.0%	

** , Statistically significant at the 0.01 level (2-tailed), * statistically significant at the 0.05 level (2-tailed).

** (VL=to a very less extent, L= to a less extent, M=to be a medium extent, G=to a great extent, VG= to a very great extent)

According to Table 5.19, there is no consensus among the sampled universities about the roles that actors play in the globalisation of Ethiopian higher education. Specifically, according to the

Addis Ababa University, all actors should be responsible for playing a role in globalising Ethiopian higher education. The other responses lack consistency regarding the extent of actors making a contribution to the development of Ethiopian global higher education. This shows that even though participants in Ethiopian universities understood the realities of the impact of globalisation on higher education policies, it is difficult to say they know that the right actors playing roles in globalising Ethiopian higher education.

Table 5.19 depicts the limited extent of actors in promoting Ethiopian higher education at the global level. The same response was observed by a participant:

Ethiopian higher education is keeping on expansion policy. When these policies are designed we don't know who the actors are during policy formulation. We only hear the new policy at its endorsement. Ethiopian Universities' chief academic staff does not have access to comment on new policies before endorsement. As a result it is difficult to decide the right actors in globalizing Ethiopian higher education. The Ethiopian higher education expansion policy and programme diversification is expected in responding to local knowledge demand. Nothing is said about internationalisation of Ethiopian higher education. This is why the right actors are not in place in globalizing Ethiopian higher education through internationalisation. (HWU- 12/5/2015).

The data in Table 5.19 show that the respondents' views demonstrate that there is no involvement of academic staff in higher education policy formulation. Most of the time Ethiopian higher education policy formulation is dedicated to serve as the government's social demand approach for political consumption with a narrowed local outlook. Policy consultants at the Ethiopian Ministry of Education are given the task of political consumption policy formulation. As a result, the technical reality of the globalisation dimension is overlooked, resulting in a higher education policy loaded with conceptual and abstract policy documents. This is why the dynamic nature of the current higher education policy with respect to globalisation discourse missed the imperatives of the Ethiopian higher education policy.

Moreover, official higher education proclamations such as the Ethiopian Higher Education Proclamation 351/2003 and the revised proclamation 650/2009 formulation were endorsed without a draft discussion between university chief administrators and academic staff. Only consultants recruited by Ethiopian Ministry of Education propose higher education legislation and those proposals are approved by Ethiopian Ministerial Councils. Therefore, Ethiopian higher education policy formulation is spearheaded by a few consultants and political men who do not actually engage in real debate on policy issues that have a wide spectrum as well as balanced, local and global policy perspectives.

Participants also raised issues about the Ethiopian public universities' consortium as an actor in higher education policy formulation. The following was said:

In the current time there is an association of Ethiopian Public Universities Consortium with regular meeting in every three months. The association was established and governed under the supervision of Ethiopian ministry of education. This association constitutes political leaders appointed as a president and vice president of the universities. There is no clear policy and legal frame works under which this association operates. Members of the associations are devoted to evaluating each universities routine activities of annual plan only for political consumption. The activities this consortium is involved with, as an actor of higher education policy formulation with respect to globalisation, is not clear. On the other hand as their educational background shows, most of the representatives of this consortium do not have knowledge of global higher education policies and related development disciplines. This is why representatives of Ethiopian public universities' councils are devoted to very limited discussion of routine university physical activities. The right actor who can play a role in globalising Ethiopian higher education policy has not appeared, yet. (AAU 4/7/2015).

This comment shows that there are no right actors with regard to policy formulation in the context of global demands. The consortium potential seems to be important for the development

of Ethiopian higher education. To promote new policy formulation in line with local and global knowledge demands, Ethiopian universities have to play a defining role. The consortium is devoted to the routine activities pertaining to yearly university planning and evaluation. This reveals the insignificant involvement of academics with sound knowledge of globalisation in the consortium. The findings of this section show that policymaking in globalising Ethiopian higher education has become a hurdle for future global competition in higher education in the country.

5.4 RESEARCH AND INNOVATION POLICIES IN RESPONSE TO GLOBALISATION

The process of teaching and learning in higher education is integrated with research and innovation. Accordingly, the integration of research and innovation in the curriculum of higher education advances the invention of new knowledge generation. Institutions with advanced research and innovation policies are commercialising their knowledge to the rest of the world. Thus, universities in the current global discourse should revisit their research reputation to meet global and local needs. Universities as players of social transformation must respond to national development via knowledge production and innovative research relevant to the local and global knowledge demand.

Today, high quality higher education leads to high quality research and innovation as a driver of social and economic development. In this regard, reliable policies should be designed for universities to promote global networking and dissemination of research output. In order to facilitate global research networking, global research cooperation in research funding, intellectual collaboration, research scholarship and knowledge sharing are needed. Policy formulation in research cooperation among universities at national, regional and international levels facilitates global knowledge dissemination for sustainable development. In this regard, the responsiveness of Ethiopian universities research and innovation policy will be described in the following section.

Table 5.20: Analysis of institutional research and innovation policy responsiveness

Universities	N	M	SD	$F_{(5,533)}$	P
Addis Ababa	93	2.67	1.09		
Bahir Dar	88	3.26	.74		
Haramaya	101	3.37	.75	9.37	0.01
Hawassa	76	3.01	.78		
Jimma	94	3.31	.74		
Mekelle	81	3.25	.75		
Total	533	3.15	.85		

Table 5.20 depicts that the extent of policy responsiveness in research and innovation is not adequate. The summary statistics (M= 3.15, SD = .85) show the limitedness of responsiveness to research and innovation at all the sampled universities.

Moreover, statistically significant differences, ($F_{(5,533)}= 9.37, p=0.01$) were observed between universities with respect to their institutional research and innovation responsiveness. Furthermore, in the case of the Addis Ababa University (M = 2.67, SD = 1.09), there is no conducive research and innovation policy environment. Next this research reports on the institutional significant differences observed that were subjected to *a post hoc* analysis in Table 5.21.

Table 5.21: Analysis Institutional differences in research policy responsiveness

(I) University		Mean Difference (I-J)	Std. Error	<i>P.</i>
AAU	BDU	-.59 [*]	.12	.00
	HRU	-.70 [*]	.11	.00
	HWU	-.34	.12	.20
	JU	-.63 [*]	.12	.00
	MU	-.57 [*]	.12	.00
BDU	HRU	-.11	.12	.97
	HWU	.24	.12	.60
	JU	-.04	.12	.98
	MU	.01	.12	.98
HRU	HWU	.35	.12	.15
	JU	.06	.11	.99
	MU	.12	.12	.96
HW	JU	-.29	.12	.39
	MU	-.23	.13	.67
JU	MU	.05	.12	.99

*. The mean difference is significant at the 0.05 level.

Table 5-21 demonstrates institutional research and innovation policies differences and similarities. According to Table 5-21, Addis Ababa University, uniquely differs from other universities except Hawassa University. On the other hand similar research and innovation policy practices are observed among Bahir Dar and Haramaya universities (MD =.11, $p=.97$), Bahir Dar and Jimma Universities (MD =.04, $p =.98$), Bahir Dar and Mekelle Universities(MD =.01, $p =.98$) and Jimma and Mekelle Universities (MD =.05, $p =.99$). This raises questions regarding why the Addis Ababa University, the largest and most prestigious Ethiopian university, differs from other universities.

In order to get realistic answers to the question, discussions were held with selected senior staff members at the Addis Ababa University. A participant reflected on the status of the Addis Ababa University regarding research and innovation policy as follows:

Addis Ababa University, with its ample experience, is expected to have responsive research policy that motivate all academic staff to be involved in local and global research work. Of course, there are staff members involved in research at local and global level. Since the last twenty years, only very few (not more than 1%) distinguished Addis Ababa University staff to be influential in research and innovation even at international level. About 90% staff members engaged in teaching and learning only while few of us engaged in what we call staff research, for academic promotion, and relied on university recurrent budget. Furthermore, we see the research and innovation policy of Addis Ababa University from internet. Actually we are not implementing it. The policy is good. But it is not in practice. Not only academic staff, we are teaching postgraduate students. These students are suffering from research budget allocation, no clear research and ethical policy guidelines are captured in the policy. Every research activities in Addis Ababa University depend on the willingness of research officers. In general, research and innovation policy of Addis Ababa University is not participatory and even not locally responsive. (AAU - 4/7/2015).

Participants from the Addis Ababa University reveal that the fragmentation of the research and innovation policy does not motivate academic staff and postgraduate students. The Addis Ababa University is the oldest of the Ethiopian universities and the data in Table 5.21 and the comment above reveal that the university is not in the position with regard to research and innovation that it should be. Another point raised by a participant is summarised as follows:

We acknowledge individual efforts made in promoting research and innovation at Addis Ababa University, particularly senior professors from health faculty, natural sciences and colleges of educations. They did a lot in linking Addis Ababa University to the rest of the world through research and innovation through their own efforts. Because of these realities, Addis Ababa University retains its prestigious position in Africa. It should be noted that the essence of Addis Ababa University research and innovation relied on only few international researchers of the academic staff. At the institutional level, it can

be said that there is no responsive research and innovation policy that spoke to global and local knowledge economy. (AAU-4/7/2015)

The point raised above shows that the attempts made with regard to research and innovation at institutional or international levels are based on individual efforts. There are no consolidated responsive research policies that encourage academic staff participation in both local and global research engagements.

Table 5-22: Analysis institutional involvement in international research alliance

		University						Total	χ^2	P
		AAU	BDU	HRU	HU	JU	MU			
Is your institution currently										
involved in any	Yes	33	40	30	23	37	27	190(42%)		
international alliance in	No	54	27	55	47	32	48	263(58%)	18.2	0.003
response to global research										
activities? [question 6.14]										

Table 5.22 depicts distinctive differences between universities with regard to international research alliance engagements. Most respondents (58%), reported that there is a limited amount of involvement in international research alliances. There is a statistically significant difference ($\chi^2 = 18.20$, $p = 0.003$) among universities' engagement in international research alliances. Table 5.22 further depicts that attempts made with regard to the international research alliance by Bahir Dar and Jimma Universities are relatively better than other universities. In this regard, a participant viewed research as:

In this discussion, we are talking about research engagement in international alliance. It is somewhat paradoxical. We are not actually engaged in local researches which have local significance. We do research for the sake of institutional ruling sovereignty, which forces us to do 25% research and 75% teaching load. On the other hand academic staff do research to get career progression, for instance from being an assistant lecturer to becoming a lecturer, from lecturer to assistant professor, from associate professor to a full

professor. Most research papers are simply shelved, and their output are not this much significant. Only few papers, whatever their quality may be, they are published in local and international journals. In recent times so many journal published outside the country with a private company which does not have any significant contribution, especially for local development; only to gain career progression. (HRU 6/5/2015).

In addition, official documents show that the two oldest universities, namely, Addis Ababa and Haramaya, the former Alemaya University, contribute a great deal through research findings in social sciences and agriculture. Their global knowledge contribution is well recorded on the Internet. In recent years, in addition to the Addis Ababa and Haramaya Universities, with internationally secured funds, the Jimma University has been engaged in international research collaboration on global issues that require comprehensive research. However, official documents and reports show that most universities in Ethiopia are engaged in minor research activities that lack relevance to local or global knowledge demands. The respondents' agreed that there was a lack of qualified manpower busy with research engagement. A participant's views on the research and innovation status of Ethiopian universities' academic staff is summarised as follows:

One critical problem in research engagement is that, we don't have fully-fledged research staff with competitive academic ground. There are a few distinguished researchers available in senior universities, like Addis Ababa, Haramaya and Jimma Universities. For instance the number of qualified academic staff with the rank of professors and associate professors is not more than 15% in Addis Ababa University, about 10% in Haramaya University and 5% in Jimma University. About 98% of our academic staffs are engaged in classroom instruction. Even academic staff members with the qualification of a PhD are not encouraged to be involved in research endeavours. Our research culture is very poor in this regard. On the other hand there are no consolidating policy guidelines that support cooperative research alliances with international mobile researchers' collaboration that can share their experiences. Poor research culture, limited distinguished researchers, absence

of international research alliances are critical problems imposed on university research performance. (HRU-6/5/2015)

Knowledge production is directly linked to the profile of the researcher's academic background. On the other hand, the official documents of universities show that there is a brain drain of highly qualified professors to other countries. This causes universities to lose highly scarce qualified manpower. The other challenge seen in Ethiopian universities' research performance is a lack of skillful manpower in science and technology research development. The Haramaya University, the former Alemaya University, is criticised much more often than other universities in Ethiopia in terms of agricultural technology transformation.

According to official documents and the research findings of Belay (2006) and Teshome (2007), the basis and mission of Haramaya University is to transform Ethiopian agriculture into the modern farming system. The university has done a great deal in plant and animal breeding. However, the most of the criticism is about the dimension of transforming the traditional agricultural tools to modern agricultural tools. The Haramaya University, in the space of 60 years, did not bring about any significant changes in farming systems, as farmers around the university plough their lands with traditional farming tools. Moreover, the Department of Agricultural Engineering is engaged in teaching and research at the Haramaya University without significant contributions to agricultural tool transformation.

The second criticism raised with regard to the Haramaya University is the disappearance of Lake Haramaya, from which the university got its current name. Lake Haramaya is one of the well-known lakes in eastern Ethiopia surrounding the Haramaya University until recent years. However, from 1995 onwards, the lake began disappearing with regard to its depth and volume, and eventually disappeared in 2010. During these periods, no scientific predictions were made. After the disappearance of the lake, minor research, mostly initiated by individuals and environmental protection authorities, has been attempted to predict the cause of the disappearance of the lake Haramaya.

However, there were soil scientists, soil and water conservation lecturers working at the Haramaya University for the last five to six decades. The contribution made by the Haramaya University via research and innovation in agricultural tool transformation and resource conservation, like Lake Haramaya, shows the status of Ethiopian Higher education research and innovation. It reveals the poor institutional research and innovation policy, the poor responsive policy regarding local development and the poor linkage of international research collaboration.

As Belay (2006) comments, the backgrounds of most of the sampled universities in this study are agriculture, except the Addis Ababa and Bahir Dar Universities. The intention of these universities with regard to agricultural science in the last 20 to 60 years was to address the shortfall in agricultural productivity in Ethiopia. The current Ethiopian development policy is also rooted in agricultural development leading to industrialization. In this regard, Ethiopian universities are expected to produce locally and global skillful manpower in an agricultural discipline that responds to the knowledge required for agricultural product improvement. It is also expected that research output released by these agricultural universities would support farmers' productivity and knowledge-based production of agriculture. The premises are that universities are expected to identify local problems and respond through research and innovation, which may be seen in this particular study as local acting. Further, locally produced knowledge is expected to be shared globally to bring cooperative development within local and global perspectives, or balance global and local knowledge. However, when observed practically, the technology and knowledge disseminated by Ethiopian universities, let alone to global demand, does not satisfy local demand. A participant noted:

I am quite sure that my colleague and I, and most of the participants of this session have ample experiences in higher education teaching and learning. We do research because; we want to get career structure or salary improvement. I am afraid to say we are generating knowledge for our surrounding farmers. Our farmers are there as they were now. I haven't seen small-scale adoption of improved technologies and practices on farmers plot of land experimented. (HRU 6/5/2015).

This the extent of Ethiopian universities' contribution to research and innovation to improve the local knowledge demand. The Ethiopian higher education proclamation 650/2009 promotes research and innovation in knowledge technology and transfer, prioritising national development initiatives. However, the participant's views show the proclamation is not translated into action. Thus, Ethiopian higher education is responding inappropriately to local knowledge formation, which is the minimum knowledge required for daily life improvement. Because of this fact, food insecurity has persisted in Ethiopia for a long period of time. It depicts the gap observed between agricultural university researchers and the surrounding farmers and the community at large.

Moreover, in today's global discourse, higher education has become a business linking local and global markets through business research and consultancy. On the other hand, documents show that there is a lack of dedicated research conducted in the commercial agriculture market system that sustains the local market demand linking agricultural production, for instance, the coffee market to the global market. The research undertaken so far is not suitable for policy makers for specific needs and local applicability in line with the social and economic environment. It means the research outputs are simply shelved without policy briefing that would suit local applicability.

5.4.1 International research alliances of Ethiopian universities

According to the official documents assessed by the researcher, the Jimma University's efforts to endorse its research and its affiliation with horticulture and health disciplines cannot be overlooked. The research alliance entered into with Belgium universities in these particular disciplines is one step towards making the Jimma University an internationally recognised university. The joint alliance between the Hawassa and Mekelle Universities on the one hand and the Norwegian government funding scheme illustrates attempts to respond to global knowledge demands through international research alliances.

The capacity building project implemented in the Ethiopian Agricultural Growth Programme (AGP) in collaboration with Dutch researchers from the Wageningen University and six Ethiopian universities' researchers from the Haramaya, Jimma, Bahir Dar, Hawassa, Mekelle and Addis Ababa Universities can be seen as the best research and innovation done at

international level. Moreover, the research alliances of the Bahir Dar University with the Stockholm Environment Institute (SEI) and the International Water Management Institute (IWMI), since 2013 to implement the project entitled: *'Advancing the Water-energy-food Nexus: Social Networks and Institutional Interplay in the Blue Nile'* jointly are also an asset for Ethiopian Universities and illustrate convergence of the global knowledge through research and innovation (MoE, 2012).

Furthermore, the institutional research and academic cooperation signed between the Hawassa University, the Mekelle University and the Norwegian University of Life Sciences with the objective of enhancing the contribution of higher education institutions towards the national policy of poverty reduction and increased agricultural productivity by improving the quality of education and research, also shows the inter and intra alliances between national and international universities. As observed before, the international research alliance made in the sampled universities' scope was limited to agriculture at the most. The scope of global responsiveness narrowed the specific collaboration. With regard to all the shortcomings of Ethiopian universities in terms of the research and innovation policies, most of the research and innovation practices regarding the sharing of local and global knowledge are at universities that were formerly known as agricultural universities, such as the Haramaya and the Jimma universities. At a glance, it can be said that, though there is no consolidated responsive research collaboration policy demanding both local and global research and innovation convergence, collaboration based on individual initiatives are in place with fragmented implementation.

5.4.2 Institutional gaps in the research and innovation policy

Higher education institutions are seen as knowledge producers, disseminators, organisers and applicers. Different institutions and industries apply the knowledge produced. The manpower produced by higher education is aggregated at different institutions apart from higher education. However, the collaboration for research and development between higher education and other institution or industries in Ethiopia is poor. One participant had the following to say:

As a policy direction, there are university industry linkages that support research and development for mutual benefits. For instance agricultural research centres, farmers training centres. Agro industries are knowledge application for students and academic staff of agricultural disciplines. Furthermore, industries like sugar factories, construction companies, hospitals and the like are knowledge application for students and academic staff of engineering, computational and health disciplines. But there is no ground structure that support institutional collaboration towards local research and development demands. In reality, our universities are not engaged in industry based research and development endeavours. (MU - 5/3/2015)

The comment refers to the institutional research policy gap that exists between universities and other industries. Many official documents show that the Ethiopian universities were not properly engaged in research and development that fosters the development of industry at large, which, in turn, contributes to local and global knowledge in terms of industry development. The poor linkage between Ethiopian higher education institutions with other government development sectors adheres to policy gap competition than cooperation. The Ethiopian government, the Ministry of Education and the official documents show that there is no cooperative policy linkage between higher education institutions and other research institutes, such as the Ethiopian Agricultural Research Institutes (EARI), the Regional Agricultural Research Institutes, the sectors under the Ethiopian Ministry of Agriculture, the Ministry of Water and Energy, the Ethiopian Institutes of Information Communication Technologies, the Ethiopian Environmental Protection Authority, the Soil and Water Conservation Institutes and other factory linkages within Ethiopian universities that encourage cooperative research and innovation.

The Ethiopian government is strongly engaged in different policy development projects for sustainable national development in general and in higher education expansion in particular. Policy gaps were observed in the areas of research and development. It needs to be reiterated that the importance of research in higher education was not given due attention during the higher education expansion policy formulation. In fact, research is seen as the second mission of

Ethiopian universities. This perpetuates institutional policy gaps. As a result, engagement in research activities at Ethiopian universities is different when compared to other universities in other parts of the world. The institutional policy gap emphasizes the paramount problem of research participation of Ethiopian universities that contributes to knowledge production.

Belay (2006) reveals that the research output at Ethiopian universities is poor. Only a few universities, among others Jimma, Haramaya and Addis Ababa Universities, host international conferences in the dissemination of research output every year. The other universities trends fluctuate every year and are confined to local workshops on research output dissemination. This trend impacts on the knowledge production of Ethiopian universities. An extremely limited research output is produced at most universities that do not possess global and local research dimensions. This situation is manifested by a shortage of senior and distinguished researchers in most Ethiopian universities.

Regarding quality researchers for quality research outputs dissemination, only the Addis Ababa and Haramaya University have senior researchers with the required skills. However, on the other hand, these universities suffered from a lack of responsive research and innovation policy that motivates senior researchers to engage in research activities. For these and other related reasons, senior researchers escape to other countries searching for a conducive research environment. Only a few accredited journals with worldwide publication are available, mostly from the Addis Ababa University, and to some extent, from the Haramaya and Jimma Universities; others are local journals with no global significance.

5.5 RESPONSIVE POLICY FOR SOCIO-ECONOMIC TRANSFORMATION

Higher education plays a role in the socio-economic transformation that can be measured in terms of local development engagements. Today globalisation is rooted in a knowledge society that emanates from a knowledge economy. Universities are the roots for forming local knowledge society that facilitate global knowledge economy. The term “global thinking and local acting” in the higher education context can be realised if higher education operates at their respective local levels. The surrounding community should be served properly and short-term training, research

output utility, collaborative and cooperative working environments are among the strategies that foster local knowledge formation. Universities, as research and technology innovators, should serve the community with research and technology via technology dissemination that foster local development, which, in turn, foster global and local integrity.

The term, “Think globally and act locally,” in today’s connotation in higher education is a means of service rendering to the local community with knowledge developed through research and innovation. This knowledge tends to develop local, regional and global transformation in sustaining development. In this regard, clear policy direction should be in place for teaching, research and innovation with local community services. The extent of Ethiopian universities local engagements is shown in Table 5.23.

Table 5-23: Analysis of institutional responsive policy in local engagement

Universities	N	M	Std. Deviation	$F_{(5,521)}$	P
AAU	92	2.70	1.31		
BDU	85	3.29	.85		
HRU	96	3.47	.88	9.35	0.00
HWU	76	2.86	.99		
JU	92	3.55	.76		
MU	80	3.15	.97		
Total	521	3.16	1.02		

According to Table 5-23, attempts made by Ethiopian universities regarding the local engagement were extremely limited. Furthermore the institutional differences were observed, ($F_{(5,521)}= 9.35, p= .00$). Table 5.23 showed that the Jimma University ($M= 3.55, SD =.76$) and the Haramaya University ($M= 3.47, SD = .88$) were in a relatively better position with regard to local engagement. From the overall average of the response rate ($M =3.16, SD = 1.02$) it is possible to deduce the poor engagement of Ethiopian universities in local development.

Table 5-24: Analysis of institutional involvement in local development

		University						Total	χ^2	P
		AAU	BDU	HRU	HWU	JU	MU			
Is your institution	Yes	15	40	17	16	41	53	182(41%)	19.73	0.01
currently involved in any	No	71	22	65	50	29	19	256(59%)		
local										
development?[question										
5.13]										

Table 5.24 depicts that 59% of the sampled universities believed that there was no local engagement. Moreover, only a few universities, such as Bahir Dar, Jimma, and Mekelle Universities were better off in terms of local engagement.

Official reports of Ethiopian Ministry of Education (MOE, 2012) show that in Ethiopian higher education, community service or local engagement are emerging as a third mission, next to teaching and learning, research and innovation. However, the universities were making insignificant contributions to local development using a different approach, such as short term training for sectors like education and business organizations. The linkage in research output dissemination for local development, especially in agriculture and technology dissemination to local farmers still fell far short of the current local and global knowledge demand. So far only one university, Jimma University, had devised its institutional philosophy, “*We are in the community.*” The Jimma University appreciated addressing the local demand with its institutional philosophy ahead of the endorsement of community service or engagement as a third mission of higher education by the government.

Jimma University is known for linking student teaching and learning projects with local community demands. Next to the Jimma University, attempts are made by the Mekelle University to improve the dry land farming system in the local community, seen as local engagement among Ethiopian universities. On the contrary, the Addis Ababa University’s local engagement was inadequate. Until the endorsement of community service or engagement as a third mission of Ethiopian higher education, apart from the Jimma University, no university was

engaged in local development endeavors. Furthermore, the features of sampled universities local engagement were described explicitly by a participant as follows:

The third mission of our university, community service and local engagement, does not have structure as teaching learning process. There is no clear mandate, no accountability. Who will be engaged in community service or local development activities? Teachers, students or university officers. We don't know. What is the load proportion for community services? We know only weekly load for teaching. It seems somewhat complicated. (HRU 6/5/2015).

The idea raised was supported by official documents as “yet, there is no defined role of our university in community services or local engagements” (MOE, 2014, p.11). It seems to be a complex situation to manage community services or local engagements unless clear policy directions are in place. The other issue raised by a participant was the question of cluster specialty:

All Ethiopian universities are engaged in similar teaching learning processes. Only two Universities, Addis Ababa Science and Technology University and Adama Science and Technology University, are recommended clustered as a specialty in Engineering and Technology University. The rest of universities are running similar teaching learning process with duplicated disciplines. For instance, an area appropriate for agriculture engaged in teaching social and education disciplines, or vice versa. When we say local development, it is directly linked to socio economic and agro ecological zone, in the case of Ethiopia. Thus, universities should be engaged in local development according to their respective socio-economic and agro-ecological zone. Moreover area specialties also encourage international institution linkage for local development. (HWU- 12/5/2015).

According to the comment, there should be a community service structure with a clear policy direction and areas of specialty that facilitate local development. University communities should be involved and that would attract the participation and collaboration of international institutions at the local level. It is further noted that the linkage between research and innovation and local development in terms of community engagement was practically not in existence. This relates to responsive policies ensuring knowledge for development that is responsible for higher education functioning to transform the socio-economy of the local societies. As the current globalisation policy demands, higher education institutions are expected to play a role in local, regional and global integration that encourages balanced cooperative development. However, this study showed that Ethiopian universities' engagement in local development was at its infant stage. One of the participants further expressed the view on university's local and global engagement as follows:

Local engagement starts from thematic area identification that helps us to get priority area to support local development. The other way round; thematic area with both local and global dimension must be identified. We as scholar didn't get these opportunities. There is no thematic area identified for both local and global engagement. There is no institutional strategic and policy direction that supports engagement particularly in global engagements. Only few individual from Addis Ababa University engaged in international activities, on the basis of individual efforts. (MU - 5/3/2015).

According to the comment, the view that no thematic area had been identified for local and global engagements was clearly articulated. On the other hand, local and global engagement starts with the apparent designed curricula that foster engagement in both local and global scenarios. The absence of an integrated curriculum from the internationalisation dimension limits the participation of both staff and students in global engagements. However, among the established universities in Ethiopia, attempts made by Addis Ababa with regard to global engagement is acknowledged. The Ethiopian government is increasingly committed to higher education expansion and programme diversification for alternative and immediate local development that supports society at local levels through local engagement, that is, community service, in Ethiopia.

Universities intuitively believe in higher education expansion and programme diversification policy as essential to generate reliable knowledge that fosters the development of modern society. However, the findings of this study showed that the government's programme expansion policy was not responding appropriately to local social problems. The engagements so far attempted have been extremely limited and insignificant services were rendered to the community in the vicinity of Ethiopian universities as short-term training. In general, the Ethiopian universities' local engagement with socio-economic transformation was far behind the current global development demands. Therefore, a new policy model for Ethiopian higher education to respond to globalisation that encourages diversified socio-economic transformation is needed.

5.6 CONCLUSION

This chapter presented findings on the policies and practices of selected Ethiopian universities in the context of globalisation. The chapter depicts the Ethiopian universities' standpoints and views regarding policy responsiveness from the realities of globalisation, in terms of both the local and global knowledge market, research and innovation policies, ICT and socio-economic transformation of Ethiopia, while being challenged to meet the demands made by the global knowledge economy. Though the detailed summary of findings of this study are presented in chapter six, the conclusion of this chapter highlighted a few points.

It is crucial to note that Ethiopian higher education has undergone significant changes within the last few years with respect to massification of public universities as a local knowledge response that in turn, promotes a global knowledge demand. In this regard, the increment in public universities' student enrollment figures over the last five years is an evidence of Ethiopian higher education massification. The graduate mix policy for science-engineering and technology admission proportion of a total enrolment ratio of 70:30 student admissions to higher education has met the policy target. However, the expansion policy and programme diversification with regard to the current global knowledge convergence and realities, globalization and programme diversification in line with curriculum standardization, still needs attention to balance the expectations and practices at the Ethiopian universities within the knowledge economy.

Accordingly, a relatively good understanding of the reality of globalisation was observed among the sampled Ethiopian universities. However, there was no uniform realisation of globalisation among respondents. Moreover, the extent of local and global policy responsiveness of Ethiopian universities are far behind the current global demands. The lack of a responsive policy in research and innovation in line with the current global knowledge demand puts Ethiopian universities in a problem situation. As a result, the extent of knowledge production and dissemination of research output is at its infant stage. Furthermore, ICT, as a means of knowledge dissemination in teaching and learning, is one aspect that can increase research output. With the exception of a few universities, it was observed that there were poor ICT services on the campuses that are associated with a lack of knowledge about the ICT infrastructure in place.

At all the sampled universities, there are no graduate employment policies that assess the profiles of graduate placements at local and global level. On the other hand, although graduate employment depends on the quality of academic programmes needed at both local and global levels, there is no programme assessment at all the sampled universities. The programme quality in Ethiopian universities is associated with the graduate mix policy that prescribes that 70% of the students should be studying science-engineering and technology, while 30% should be studying the humanities and social sciences. However, it is difficult to imagine where the graduates search for jobs either locally or globally and where programme quality plays a deciding role in their employment. A major challenge is that universities do not have tracer study programmes to follow-up on their graduates' employment placing.

The implementation of the Bologna process as part of policy reformation in Ethiopian higher education is regarded as essential for standardising the teaching-learning processes of Ethiopian universities. On the other hand, as the Bologna process endorsement has been adopted without professional consultation and concerned stakeholder involvement, it lacks technical feasibility. For instance, competence-based teaching approaches, the flexibility of curricula and students' mobility are the missing areas of the Bologna policy in Ethiopian universities. Even the curriculum standardisation pertaining to local and global market demands are critical issues that need rationalisation. As to the current internationalisation process of teaching and learning,

policies for foreign students, professors' recruitments and curriculum standardisation within global contents in the perspective of global and local demands are still far from reality.

In conclusion, even though Ethiopian universities are expected to play a role in socio-economic transformation, their curriculum quality and standards, policies of diversification and programme quality in teaching and learning, research and innovation of local and global applicability are not responsive to the current realities of the global knowledge economy. This chapter shows policy gaps at Ethiopian universities from the global perspective that need revision with regard to the most relevant issues pertaining to balancing local and global realities.

CHAPTER 6

SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This is the final chapter of the study entitled “Globalisation and its Impact on Higher Education policy in Ethiopia.” The chapter focusses on the major findings, conclusions and recommendations pertaining to this study as well as the researcher’s reflection. The first section containing the summary of findings deals with the theoretical and conceptual framework of globalisation and higher education presented in chapter one, two and three of the literature review and Ethiopian higher education development trends that link to the empirical findings of the study. The second section deals with major findings of an empirical study on policy responsiveness of Ethiopian universities which speaks to basic research questions, and the third section deals with recommendation along with an alternative policy model for Ethiopian universities. Lastly, the researcher’s reflection and the conclusion of the study is presented.

6.2 SUMMARY OF THE MAJOR FINDINGS OF THE LITERATURE REVIEW

This section presents summaries of the literature reviews regarding globalisation, internationalization and role of higher education and trends of Ethiopian higher education development in the global knowledge demand economy.

6.2.1 Globalisation and higher education

For several decades, globalisation has been conceived as an economic phenomenon, which comprises worldwide economic integration under one policy umbrella. However, the globalisation economic policies including the free market policy, have been shaped according to the principle of ‘fit for purpose’ for different localities in responding to the difference forces of globalisation. In a similar vein, globalisation extends its pressure on higher education institutions as knowledge marketization and cross-border education according to different modes of approaches. As a result higher education is subjected to the dynamics of globalisation as a core

force underpinned by rationalist and capitalist knowledge production that aims to govern the global knowledge economy.

The forces driving globalized society are becoming increasingly and critically dependent on knowledge for addressing problems and challenges at all levels. In this global discourse, higher education has a vital role in inventing new knowledge for local development that in turn forms the knowledge society that facilitates the notion of regional development and social and economic commitment. The literature and the scientific justification of globalisation and its impact on higher education policy are well-articulated by many scholars (cf. Altbach & Knight, 2007; Altbach, 2003; Altbach, 2006; Aarts & Heinz, 2010; Knight, 2004; Knight, 2006, Tefera & Altbach, 2008; Douglas, 2012, Scott, 2005; Marginson & Van Der Wende, 2009; Coulby, 2005; Keeley, 2007; Evans *et al* 2011). These scholars produced concrete evidence of the impact that globalisation has on higher education policy and the responsiveness of internationalisation of higher education to globalisation discourse is dealt with by these scholars. It is evident that economic and cultural globalisation is impacting the way higher education institutions are operating in a new era of globalisation. Global higher education is more ontologically open than its organisational systems, with a range of opportunities for innovations, alliances and markets.

According to the current theories of globalisation, higher education institutions entered into relationships with other social institutions. In responding to global discourses a call for internationalisation of higher education has been made to bring the local and global knowledge convergences that respond to globalisation forces. The findings of the literature confirm that higher education institutions can play a role in the local and global intersection of the knowledge economy. This can be realised when universities formulate their institutional policies in line with local needs, particularly socio-economic transformation, global economic competence, knowledge production and knowledge convergences.

As globalisation is leading the world under one umbrella, institutions of higher education should have a responsive policy to this global discourse in which the economic and political structures become more and more intersected by reliable and viable policies. According to different reviews policies and practices are carefully steered in predetermined directions through a broad spectrum

of university transformations that encourage a common process of reform in higher education institution in response to globalisation. As a result, global higher education policy is an emerging area of research that examines the different ways in which globalisation processes, agents and events contribute to higher education policy change.

In a global knowledge economy, higher education institutions are important for cross-border global flows of knowledge and technologies. The development of a pool of global-minded manpower, which is independent and innovative, is needed for nations to be globally competitive. Therefore, the impact of globalisation has not only altered the higher education policy but also the way policy makers think about and study education policy.

Higher education is critical to national economic development in the knowledge economy for its role in both knowledge production and the training of knowledge workers. Although knowledge is now being produced in a variety of organisations around the world, universities remain extremely important in the hierarchy of knowledge production. Accordingly, the understanding here is that the dimensions of the changing role of higher education in changing societies is becoming debatable in policies in higher education. This is why higher education institutions are more important than ever as media in global knowledge economies. Inevitably, issues of globalisation and knowledge societies need responsive higher education policies for equitable social change and national development. The process of globalisation discourse is directly impacting how higher education institutions produce, apply and disseminate knowledge. Therefore, the relevance of global higher education implies: responsive policy to global discourses, responsive policy to the world of work, responsive policy to levels of the education system, responsive policy to local development and socio-economic transformation, responsive policy to research and innovation and responsive policy to graduating students.

As a concluding remark to the literature reviewed, in the global knowledge economy, the role of higher education and the nature of universities require change in policies, practices and systems, with respect to local and global contexts towards a distinctly new, global model of higher education

6.2.2 Summaries of major findings pertaining to Ethiopian higher education development

Regarding Ethiopian higher education development, the literature consulted included the background of the country's development policy in association with higher education expansion policy. Ethiopian economic dependency has mainly relied on agriculture. The current growth and transformation plan of the Ethiopian government endorsed in 2010 describes agriculture as a leading sector to promote industry. Because of this fact, the country's economic development is seen as Agricultural Led Industrialisation.

Ethiopia is one of the poorest countries even when compared to developing countries in Africa. The country's population experienced severe famine and starvation for a long period of time. Farmers are traditionally engaged in subsistence farming for survival. Thus, there are no educated farmers or mechanised agriculture to satisfy basic needs such as food. However, the country has a natural gift of fertile land with appropriate rainfall and enough water resources for potential irrigation. The intention of the Ethiopian government is holistic development of all sectors, with agriculture as an engine of the economy. The agricultural led development is aimed at fostering development rooted in agriculture and gradually, producing educated manpower to promote the birth of an industry. However, the contribution made by higher education in agricultural development is not very significant, although the country's rural area hosts about 87% of rural dwellers, although traditional farming continues.

The literature revealed that modern higher education in Ethiopia was developed under the influence of the British and the Americans. Because of this reality, modern Ethiopian higher education, young compared to other African countries, inclined towards Western higher education policies, especially from 1954 to 1974. This period was the time where Ethiopian education, because of the Western influence unintentionally became internationalised. However, during 1975 to 1991, Ethiopian higher education collapsed.

The reform landscape of Ethiopian higher education began to evolve from the current Ethiopian Education and Training Policy of 1994, which was underpinned by a dream to promote education

for development and to direct higher education towards the economic and social transformation of the country. To put this into effect, this government introduced the initiative of the twenty year Education Sector Development Plans (ESDPs), divided into a number of five year progressive plans aligned with the government's short term development plan. Among others, Education Sector Development Plans(,ESDPs) III and IV of (2005/6-2014/15) act as the basis for the Ethiopian higher education expansion policies resulting in an increase from two to thirty-two public higher education institutions.

It is evident that there has been a quantitative expansion of Ethiopian higher education within the last ten years of the current policy environment; in which the landscape of Ethiopian higher education institutions is changing rapidly. Having recognised the merits of this the expansion policy, severe criticism has been levelled because of challenges with regard to the quality of these Ethiopian universities. Consequently, the, Ethiopian higher education system is internationalising its curriculum without critical analysis of the current local and global knowledge demand. Moreover, the admission policy is also designed in such a way that it must satisfy the country's manpower demand in the science and technology disciplines with a 70:30 graduate mix with 70% selected for the science and technology disciplines and 30% selected for the social science and humanities disciplines. However, within this rapid enrolment expansion drive and the 70:30 admission global policy, programme quality and local and global human resource demand scanning has not been clearly articulated.

Furthermore, to align with the Bologna process, the harmonisation policy, competence- based education and credit transfer systems were endorsed. In this regard, the Bologna process was seen as an opportunity for the global work placing of professionals, global research and innovation, global cross-border education, student mobility and local development policies endeavours regarding global competencies. These, however, have not been investigated yet from a globalisation perspective.

The following conclusions can accordingly, be drawn from the literature:

- In a global knowledge economy, the role higher of education and the nature of universities within it, needs to change its policies and practices and systems, with respect to local and global contexts towards a distinctly new, global model of higher education.
- The Ethiopian government development policy is an Agricultural Led Industrialisation policy.
- The development of the Ethiopian higher education basis was inclined to Western higher education policies until 1974.
- From 1974-1991, the Ethiopian higher education policy was based on communist policy ideologies, with a retarded expansion policy.
- From 1991, Ethiopian higher education started to develop a new policy landscape in line with the government development policies and programmes. In the last two decades, higher education expansion, programme diversification and graduate mix, curriculum standardization and the Bologna processes are among the new reform policies endorsed in Ethiopian higher education.

The literature review showed the critical impact of globalisation on higher education policy and trends in Ethiopian higher education development with exposure to different policies.

6.3 SUMMARIES OF THE MAJOR FINDINGS OF EMPIRICAL STUDY

Based on the empirical data analysed in chapter five of the thesis, the major findings are presented in line with the basic research questions.

6.3.1 The realities of globalisation for Ethiopian universities

According to the empirical data, Ethiopian universities are well aware of the realities of globalisation discourses. However, differences were observed among respondents regarding the impact of globalisation on higher education policy. The data in Table 5-2 and Table 5-5 reveal that statistically significant differences were found between lecturers and associate professors and between assistant professors and postgraduate students. The study shows that associate professors

not only have a good understanding of the realities of globalisation, they also have a more optimistic view than the other respondents.

Regarding the features of globalisation and its impact on the higher education policy, the associate professors responded differently from the other respondents. The data revealed that higher education professors observed the institutional responsiveness regarding global discourse and global knowledge convergences critically. Furthermore, the majority of the respondents (77.5%), irrespective of their academic rank, believed that the impact of globalisation affected Ethiopian higher education policy. Most respondents perceived globalisation in terms of forces imposed on a nation state to implement the new policies and rules governed under globalisation discourses. As a result, it is believed that the impact of globalisation affects the Ethiopian higher education policies and practices.

At institutional level, a similar understanding was observed regarding viewing the realities of globalisation optimistically. Table 5-6 shows that all the sampled universities had an optimistic attitude regarding the realities of globalisation. At all the sampled universities, opportunities gained from global discourse and challenges to cope with globalisation were also well understood.

However, the study shows that there was no practical engagement with regard to responding to globalisation policies. The study shows that the Ethiopian higher education long term or strategic plans do not address the issue of making Ethiopian higher education global. The findings reveal that all the Ethiopian universities are drawing up their strategic plans based on the Ethiopian government's Growth and Transformation Plan (GTP) of the higher education sector. However, the study reveals that the strategic plans of the sampled universities exhausted the potential student supplies and led to the duplication of programmes.

Furthermore, the findings of the study indicated that in Ethiopian universities, it is difficult to find an exhaustive strategic plan of internationalisation in response to globalisation. In a few cases, namely, the Addis Ababa, Jimma and Hawssa universities, the five-year strategic plans spoke about international research collaboration to gain global reputability. The impact of

globalisation and its responsive policies were not reflected in the strategic planning of the sampled universities. This study reveals that Ethiopian higher education policy endorsement in international collaboration and international policy integration for mutual benefit in response to the current global discourse is in its infancy.

As a concluding remark on the findings of the study regarding conceptual understanding of the realities of globalization, it can be said that:

- All universities had a similar understanding of globalisation discourses.
- At the respondents' level, statistically significant differences were observed regarding an understanding of the impact of globalisation on higher education between associate professors and other respondents.
- Most respondents agreed on the opportunities for globalisation for higher education curriculum standardisation, staff and student mobility, global competition, global recruitment and working opportunities. However, a few respondents did not agree with regard to the opportunities offered by globalisation.
- The respondents' views revealed that the impact of globalisation and its responsive policies and strategies had not yet been articulated in higher education strategic planning at either ministerial or university levels.
- Inadequate internationalisation practices in response to globalisation discourses were perpetuated at all the Ethiopian universities.
- At none of the sampled universities was there an exhaustive strategic plan for internationalisation in response to globalisation.

The findings derived from the analysis show that a good understanding was observed regarding realities of globalisation and its discourses by the Ethiopian university staff and students. However, regarding the impact of globalisation on higher education as an opportunity or as a challenge, differences were observed. The differences observed can be associated with respondents' experience and exposure to global policy engagements.

6.3.2 Extent of responsive policies for local and global knowledge demand

This section presents summaries of the empirical study regarding policy responsiveness in teaching and learning, programme diversification and expansion policy, graduate mix policy, internationalisation practices in teaching and learning, extent of the use of ICTs in Ethiopian universities, the current university governance status and responsiveness of the policy for the employment of graduates and the programme quality.

6.3.2.1 Policy responsiveness to teaching and learning

To balance global and local knowledge development, higher education needs to have responsive policies and programmes that complement each other. However, the findings of the study presented in Table 5.9 shows the limited extent of institutional policy responsiveness to teaching and learning. Moreover, Table 5.9 shows a statistically significant difference observed between universities regarding teaching and learning responding to the current global knowledge convergences.

The findings of the study reveal that although all public universities of Ethiopia were implementing the Bologna process teaching-learning approaches, they did not have similar views about institutional teaching and learning policies. For instance, the majority of the institutions (54%) agreed on the responsiveness of the Bologna process to the current global knowledge convergence, whereas the majority of the Addis Ababa and Haramaya Universities perceived it differently. To some extent, Ethiopian universities appreciate the Bologna process for regional and global integrity. However, the challenge is the way it is endorsed without clear consensus among the implementers. According to the findings of the study, the endorsement of Bologna process by its nature is to standardise Ethiopian higher education with uniform qualification and accreditations.

However, the adoption process took place without complete and common consensus having been reached through an assessment of Ethiopian higher education background contexts, the status of academic resources considerations and qualified manpower-academic staff in measuring

competency-based education outcomes. The findings of the study reveal the adoption of the Bologna process as an instrument for responding to the current global knowledge convergences. Because of the Bologna process, the curriculum reforms were regarded as both a challenge and an opportunity. Finally, the findings revealed that the Bologna was one form of the global process.

6.3.2.2 Programme diversification and expansion policy

To cope with the current global knowledge competencies and convergence programme diversification and expansion policy in Ethiopian higher education, drastic policy reforms were formulated. The findings of the study reveal that expansion policy and trends regarding programme diversification and enrolment in teaching and learning and staff development had increased rapidly over five years (2010 to 2014). The trends of enrolments and the level of academic programme diversification are seen as evidence that expansion policy has met its target. According to Figure 5.2, there was a rapid increase in enrolment at a rate of 50% over five years (2010-2014). The study reveals that this rapid increment in student enrolment is because of the establishment of nine new universities, named third generation universities, over the last five years.

Regarding enrolment in terms of programmes, the findings show that 94.5% of students enrolled in undergraduate programmes, 4.9%, in master's programmes and 0.6% in PhD programmes. This shows that the enrolment trend of the postgraduate programme is not proportional to the undergraduate enrolment. Moreover, the proportion of students in the Ph.D. programmes is insignificant compared to the other enrolments. Furthermore, the enrolment data pertaining to master's programmes, when compared to the undergraduate programmes, is challenging with regard to meeting the needs for highly qualified manpower with distinctive teaching and research staff that can contribute to knowledge production and innovation. This shows that programme diversification in high-level training, such as Ph.D. programmes, is still lagging behind the intended programme diversification policy.

6.3.2.3 Graduate mix policy

One of the recent policies of Ethiopian higher education is a graduate mix policy intended to implement the proportion of 70: 30 student enrolment at Ethiopian universities in science-engineering and technology on the one hand and the social sciences and humanities on the other hand. The findings of this study revealed that 374,485 students were enrolled in science-engineering and technology disciplines from 2010 to 2014. That is, of the total student enrolment figure of 534,978 from 2010 to 2014, 70% (374,485) of the students enrolled in science-engineering and technology fields; while the rest, namely, 30 % (160,493), enrolled in the social and humanity disciplines.

This study shows that the overall average enrolment in science and engineering and technology increased by 20 to 25% per year that resulted in an increment of science and technology students of 124,221 from the baseline year to 2014 within the preceding five consecutive years. This essentially fulfilled the graduate mix policy of 70:30 student admissions to higher education to satisfy the manpower gap in science and technology of this country.

The correlation matrix of a graduate mix policy of higher education enrolment at the national level shows a strongly significant positive relationship ($r=0.978$, $p<0.01$) science and engineering and technology and total enrolment. The correlation matrix depicted in Table 5.14 shows that the total enrolment trend of 2010 to 2014 in Ethiopian universities clearly met the graduate mix policy that constituted the proportion of science-technology and engineering students at 70% with the others constituting 30%. On the other hand, the policy premises in diversifying academic staff quality by means of a postgraduate programme at master's level and a PhD programme and expatriate recruitment, show no statistically significant correlation. This situation forces policy makers to design alternative policies to align staff qualifications with the extra enrolment trends experienced in Ethiopian higher education.

From Ethiopian higher education development perspectives, all the sampled universities were considered to be established and well organised universities. However, the study shows that the Addis Ababa University is the largest university in terms of postgraduate enrolments followed by

the Haramaya University. In contrast, the Bahir Dar, Mekelle, Hawassa and Jimma Universities' capacity to enroll postgraduate students was extremely limited. Because of this situation, a considerable number of postgraduate students were placed at the Addis Ababa University.

In terms of staff development the Addis Ababa and Haramaya universities were the largest universities with regard to employing a considerable number of academic staff. This is because the Addis Ababa University has a large number of both undergraduate and postgraduate students; the Haramaya university had a more proportional enrolment figure with regard to its postgraduate programme in comparison with the Addis Ababa University that required the number of academic staff to be in proportion to the student enrolment figures. Accordingly, 85% of academic staff were Ethiopians, while 15% were expatriate staff at the sampled universities. Proportionally, the Haramaya University had the most expatriate staff members of all the sampled universities. It is interesting to note that the Haramaya University was the largest university that had a diversified postgraduate programme. The Mekelle University had the lowest number of expatriate employees of all the sampled universities.

From an internationalisation perspective, the recruitment of international staff promotes global knowledge sharing. However, the study confirms that most expatriates were drawn from India. For instance, 98% of the Haramaya University expatriate staff was recruited from India, a fact that needs additional research regarding why expatriates from one country were preferred.

Regarding staff qualifications, the findings show that 55.6 % academic staff had a master's degree qualification, while 9.1 % had a PhD degree; the rest 35.5 % had neither a master's nor PhD academic qualification. This in turn affects the quality of teaching and learning as well as the quality of graduates. The Addis Ababa and Haramaya Universities had a better staff composition with regard to academic qualifications compared to the other universities. The Addis Ababa University had many more staff with a PhD degree than the other selected universities that were below the standards required for engagement in research as well as for the scholastic teaching and learning processes. In effect then, Ethiopian universities were still experiencing a shortage of manpower with the required qualifications and experience in internationalising Ethiopian higher education that, in turn, responds to global knowledge convergences.

The findings reveal that the programme diversification and graduate mix policy matrix of the sampled universities showed similar trends in accordance with the national level enrolment and graduate mix policy. At all the sampled universities referred to in Table 5.17, there was a strongly significant relationship between science-engineering and technology enrolments with the total student enrolment ($r=0.965$, $p<0.01$), and a slightly significant relationship ($r=0.543$, $p<0.01$) between science–engineering and technology enrolment with the master’s programme enrolment.

Furthermore, the findings of the study depicts there is no statistically significant positive relationship between staff development programmes with total student intake capacity of the universities and graduate mix policy with regard to programme diversification and staff development and also to the graduate mix policy. This confirms that universities are fully engaged in improvement concerning the enrolment ratio keeping the graduate mix policy while disregarding diversified academic staff development that predicts the quality of teaching learning. Furthermore, the finding shows that programme diversification, graduate mix policy and staff development in sampled universities and national level are completely complementary to each other. In both analyses, a statistically strong correlation was observed in the graduate mix policy of 70:30 student enrolments in relation to the total enrolment.

6.3.2.4 Internationalisation practices in teaching and learning

One of the internationalisation measurements of higher education is its curriculum reputability, student scholarship and mobility, international staff recruitment and exchange programmes. The findings of the study show that few students were admitted from neighbouring countries at the Addis Ababa, Haramaya, Jimma and Mekelle Universities. Interestingly, these students were not admitted because of the institutionalisation policies regarding student recruitment; rather bilateral agreements at government level were backed by political support.

However, some expatriate lecturers, particularly the Indians, were recruited by some Ethiopian universities to fill the manpower gaps. These facts reveal that Ethiopian universities lack the integration of and exposure to international students and professors with regard to teaching-learning, research and innovation at global level.

Furthermore, the findings of the study show that the lack of internationalisation policy regarding teaching and learning are challenging postgraduate study programmes at Ethiopian universities. In this regard, the study confirms that the curriculum designed for the postgraduate programme was not evaluated at international level and lacked international visibility. Moreover, there was no staff and student exchange programme on a scholarship basis. There is no opportunity for a visit of international professors as a lecturer or supervisor. The qualification and academic rank of staff engaged in teaching and supervision for doctoral students were not satisfactory. Fresh graduate PhD holders were assigned for thesis supervision. As a result, it took five to six years to complete doctoral study programmes. Because of these facts, most Ethiopian students admitted to postgraduate programmes preferred to study at universities abroad rather than at their local universities.

One of the indicators of global higher education is higher education ranking. The study shows that the Addis Ababa and Jimma Universities were among other universities included in regional rankings during the preceding five years, whereas the majority of the universities were not ranked regionally among the first top 100 universities in Africa. In global ranking, Ethiopian universities did not get ranking among the first top 100 universities at global level. The fact that only a limited number of Ethiopian universities were found in the regional rankings, for instance, only the Addis Ababa and Jimma Universities ranked among the 100 top universities in Africa, shows the limited global knowledge share of Ethiopian universities.

The study confirms attempts made by Ethiopian universities to practice internationalisation based on individual efforts. Because of its geographical location, the most advantaged university namely the Addis Ababa University, had the opportunity of entering into a memorandum of understanding with many international institutes in academic and research affinities, In contrast, the Jimma University was engaged in a postgraduate programme scholarship with research partners in the United States and Europe in material science and engineering programmes and was in alliance with the Bahir Dar University of Ethiopia and Cornell University to deliver a master's of professional studies (MPS) programme in international agriculture and rural development. This represented an important step forward for Ethiopian higher education with

regard to internationalising their curriculum. This study generally revealed the limited internationalisation of Ethiopian universities.

6.3.2.5 Extent of the use of ICTs in Ethiopian universities

The findings showed that the ICT utility for global knowledge sharing was not well thought of among the Ethiopian Universities. As result, the linkage in teaching-learning, research and innovation with other international universities was insignificant. Among the sampled universities, only the Jimma University made advancements with regard to ICT application in teaching and learning, library digitalisation, and tele-conferencing in health sciences with international staff, which was encouraging

The study revealed that postgraduate students especially were being disadvantaged because of the lack of ICT utilities to facilitate their teaching-learning, research programmes as well as the investigation of new theories and principles with the aid of ICT. The low level of technology, such as limited internet availability to engage in scientific communication with other international universities, searching for a research grant and scholarship application and publication, were some of the problems that postgraduate students in Ethiopian universities experienced. This was an indication of poor ICT development at Ethiopian universities. Even though Ethiopian universities were investing in ICT development, there were problems associated with skilled manpower problems with regard to utilising the developed ICT infrastructure for the practical application.

6.3.2.6 The current university governance status

In today's global arena, higher education internationalisation not only entails curriculum, staff and international student exchanges and scholarship offerings, but it is also about the provision of new governance that promotes global academic leadership. Higher education with global-minded leadership leads to more global opportunities in terms of internationalising the university.

According to the findings of this study, Ethiopian universities are implementing business process re-engineering (BPR) in line with decentralisation policies that facilitate teaching-learning, research and local engagements. The findings of this study confirm that Ethiopian universities' governance has been engaged for the last ten years in the implementation of different reform tools. These tools are business process re-engineering (BPR), the balanced score card (BSC) and the like. To implement these reform tools, political party members are appointed as university presidents and vice presidents. The study showed that the pool of the university administration staff from the presidents to the college dean, even at some universities up to department heads and course leaders were members of the political ruling party. The intention of BPR was to introduce decentralised governance reform in accordance with the current Ethiopian higher education proclamation 650/2009. However, this study confirms that none of the sampled universities were comfortable with the reform tools and assignment of university administration. These facts reveal that the governance of Ethiopian universities is purely a politically oriented governance system.

This study further confirms that all decisions passed regarding higher education curriculum formulation, and strategies and legislative proclamations were approved without consensus reached by higher education stakeholders' involvement. For instance, official higher education proclamations such as the Ethiopian higher education proclamation 351/2003 and the revised proclamation 650/2009 formulation were endorsed without draft discussions held with university chief academic staff. Only the consultants who were recruited at the Ethiopian Ministry of Education with little involvement of political men, drew up the higher education legislation and received approval by the Ethiopian ministerial councils. This confirms that the highly centralised governance of Ethiopian higher education policy formulation involved a few consultants and political men without any real debate on policy issues on a wider scale in line with the balanced local and global policy perspectives.

The study illustrates that the properly qualified people were not involved in policy formulation in accordance with the current global demand. The findings of the study reveal that the governance of Ethiopian universities was not in line with the merit-based and democratic governance principles of globalisation. Therefore, restructuring of the governance and leadership of higher

education is needed in line with the current globalisation policy that permits academic competition for knowledge production, which, in turn, contributes to local and global development.

6.3.2.7 Responsiveness of the policy for the employment of graduates and the programme quality

The success of one global university is measured by its programme quality and opportunity for graduate employment that can be realised when the institutional policy framework operates under local and global employment opportunity dimension. The findings of this study, on the contrary, showed that Ethiopian universities did not have a responsive policy with regard to graduate employment demand and programme quality assessment. From the analyses done at the institutional level, the results in Table 5.18 confirm that no attempts were made at all the sampled universities to ensure graduate employment and programme quality assessments. The findings of this study confirmed that institutions were not assessing their programme quality and market demand at local and global levels with regard to determining employment opportunities for graduates. This is an indication of Ethiopian universities' engagement with programme duplication and enrolment ratios without critical analyses of the desired academic programmes in terms of quality and diversity of the disciplines for local and global demands.

One critical finding of this study was associated with the graduate mix policy of Ethiopian higher education needed for the ratification of employment opportunities. According to the graduate mix policy entailing the 70:30 proportion, the majority of the graduates graduated in the science - engineering and technology disciplines. The current enrolment statistics shows that more than 375,000 students graduate every five years with about a 20% increment in science–engineering and technology every year. Here the question of employment may be raised regarding where to employ the graduates, what are their opportunities, and whether local or global employment absorbs the graduates. To answer these questions, Ethiopian universities are expected to assess the manpower demands at local and global level in all the programmes of the respective disciplines.

The Ethiopian government policy option behind the expansion of higher education is producing citizens who are creating a new job rather than seeking a job. However, the findings of the study are pessimistic regarding the government policy premises with the quality of graduates in creating jobs. The study is hesitant about the quality of the inputs and processes such as the quality of the curriculum in terms of global and local dimensions; the quality of the staff and the infrastructure are affecting the quality of graduates adversely with regard to meeting the policy premises of creating new jobs rather than searching for employment. This finding reflects a critical stance regarding issues pertaining to the mass higher education without quality infrastructure, the quality of academic staff and the standard curriculum that may create a graduate unemployment crisis.

Regarding the major findings of the study concerning the extent to which Ethiopian universities respond to local and global knowledge, the following concluding remarks are made:

- The institutional policy is poor with regard to aligning the teaching-learning policy within internationalisation principles that, in turn, respond to global knowledge convergence.
- The Bologna process is perceived as an opportunity for global response, however, challenges were observed as its implementation lacked cognisance of local realities.
- The curriculum for teaching-learning approaches lacks international dimensions as only domestic students and academic staff are engaged. There is no policy option for international students and professor recruitment for global knowledge sharing.
- Attempts made regarding the internationalisation of Ethiopian universities relied on individual efforts, rather than on consolidating the policy of the institutions.
- Postgraduate education delivery lacked international visibility for student mobility and global knowledge sharing.
- The expansion policy of Ethiopian higher education was expected to satisfy the local knowledge demand. The higher education expansion and the total enrolment in higher education do not meet the Ethiopian government policy premises.

- The curriculum designed diversified programme reliability for local and global market is still not satisfactory
- Ethiopian universities do not have graduate employment and programme quality assessment policies
- The endorsed graduate mix policy has met its policy target in promoting the enrolment ratio in science-engineering technology disciplines.
- The quality of graduate programmes and employment opportunities at local and global markets will be a challenge for the near future.
- The quality of academic staff, the level of qualifications, their experience and engagement in the teaching-learning process of diversified programmes are seen as policy gaps.
- The poor governance of Ethiopian universities is a challenge preventing the application of global principles.
- The poor ICT utilities for global knowledge sharing are a challenge concerning a response to the current local and global knowledge convergences.

In short, concerning the competitiveness of Ethiopian universities with regard to teaching and learning and responding to the current local and global knowledge convergences, the policy viability needs to be revisited in a way that is suited to an international alliance to support global knowledge sharing.

6.3.3 The status of research and innovation policies in Ethiopian universities

The section explores institutional research and innovation policy responsiveness, criticism regarding research and innovation practices, status of international research alliances institutional gaps in research and innovation policies of Ethiopian universities.,

6.3.3.1 Institutional policy responsiveness

The findings of this study show that the responsiveness of Ethiopian universities' research and innovation policy is not adequate. The study revealed the poor performance and engagement observed with regard to research and innovation at universities with different approaches. This study confirmed that the poor performance and engagement in research and innovation of Ethiopian universities was strongly linked to the poor institutional research and innovation policy depriving academics of the right to academic involvement in local and global research and innovation careers.

The other critical problem found regarding research and innovation was the lack of full-fledged research staff with a competitive academic grounding. Extremely few distinguished researchers were available at senior universities, such as at the Addis Ababa, Haramaya and Jimma Universities. According to this study, the percentage of qualified academic staff at the rank of professors and associate professors did not amount to more than 15% at the Addis Ababa University, they totalled about 10% of the staff at the Haramaya University and 5% at the Jimma University. About 98% of academic staff were engaged in classroom instruction. Even the academic staff with a PhD qualification were not encouraged to become involved in research endeavours. On the other hand, no consolidated policy guidelines were available that supported cooperative research alliances with international mobile researchers for experience and knowledge sharing collaboration.

The findings further revealed that academic staff did research with the aim of being promoted for instance, from assistant lecturer to lecturer, from lecturer to assistant professor, associate professor and the like. Others did research because it was mandatory for academic staff to spend 25% of their time engaged in research. Most research papers were simply shelved and the researchers' output was not really significant. One critical finding of this study showed that only a few papers, regardless of their quality, were published in local and international journals. In recent times, many journals were published outside the country by private companies that did not make any significant contributions, especially to local development; the sole purpose was to promote the careers of the researchers.

6.3.3.2 Criticism regarding research and innovation

The study revealed that the two oldest universities, namely, the Addis Ababa University and the Haramaya University, the former Alemaya University, contributed extensively through their research in the social sciences and agriculture disciplines. Nevertheless, there was criticism by stakeholders regarding the status of research and innovations at Ethiopian universities.

The findings of the study clearly revealed the research and innovation challenges; for instance, the case of the Haramaya University that received more criticism than other Ethiopian universities in terms of agricultural technology transformation. According to the empirical data of the study, Haramaya University, over 60 years old, was first called the Alemaya Agricultural Techniques College, and then the Alemaya University of Agriculture. The basis and mission of the Haramaya University was to transform Ethiopian agriculture into a modern farming system. The university has done a great deal with regard to plant and animal breeding. However, most criticism raised pertained to transforming traditional agricultural tools into modern agricultural tools. According to this study, over a span of 60 years, farmers around the university ploughed their lands with traditional farming tools. However, the Department of Agricultural Engineering has engaged in teaching and research at the Haramaya University without making a significant contribution with regard to agricultural tool transformation.

The second criticism that was expressed with regard to the Haramaya University is the disappearance of Lake Haramaya, from which the university got its current name. Lake Haramaya was one of the well-known lakes in eastern Ethiopia near the Haramaya University until recent years. However, from 1995 onwards, the lake began disappearing and eventually disappeared in 2010. During this period, no scientific predictions were made. After its disappearance, only research initiated by individuals and environmental protection authorities has attempted to determine the cause of the disappearance of the Lake Haramaya in spite of soil scientists and soil and water conservation lecturers who had been working at the Haramaya University for the last five to six decades. The reason behind this problem was the lack of appropriate policy guidelines that promoted academic staff research engagement. This can be taken as a realistic indication of the contribution of Ethiopian universities to research and

innovation regarding local and global knowledge. This research revealed a poor institutional research and innovation policy and a poor responsive policy concerning local developments.

The findings of the study confirm that regarding research output trends, only a few accredited journals with worldwide publication contain articles written mostly by researchers from the Addis Ababa University, and to some extent, from the Haramaya and Jimma Universities; other articles were published in local journals with no global significance.

6.3.3.3 Limited international research alliances

The findings of the study revealed distinctive differences between universities in international research alliance engagement. Most respondents (58%) confirmed the fragmented international research alliance of Ethiopian universities. According to the study, only a few universities had research alliances with international universities. A joint research alliance was entered into by both the Hawassa and Mekelle Universities with the Norwegian government funding and a research capacity building project was implemented in the Ethiopian agricultural growth programme in collaboration with Dutch researchers from the Wageningen University. Other alliances were entered into by six Ethiopian universities' researchers from the Haramaya, Jimma, Bahir Dar, Hawassa, Mekelle and Addis Ababa Universities respectively and research alliances of Bahir Dar University with the Stockholm Environment Institute (SEI) and the International Water Management Institute (IWMI) illustrate attempts made to respond to the global knowledge demand through international research alliances.

Moreover, the findings revealed that the scope of the international research alliance entered into at sampled universities was mostly limited to agriculture. It reveals that most research done and innovation introduced with regard to sharing local and global knowledge was at universities formerly established as agricultural universities, such as the Haramaya and Jimma universities. Although there is no consolidated responsive institutional research policy, collaboration based on individual initiatives is in place with fragmented implementation.

6.3.3.4 Institutional gaps in research and innovation policy

It is clear that higher education is seen as knowledge producer, disseminator, organiser and applier. There are different institutions and industries applying the produced knowledge. The findings of the study showed that the collaboration for research and development between universities and other institution or industries in Ethiopia was scant.

This study confirms that there is no cooperative policy linkage between higher education institutions and other research institutes, such as Ethiopian Agricultural Research Institutes, EARI, Regional Agricultural Research Institutes, Sectors under the Ethiopian Ministry of Agriculture, the Ministry of Water and Energy, the Ethiopian Institutes of Information Communication Technologies, the Ethiopian Environmental Protection Authority, Soil and Water Conservation Institutes and other factories or even linkages within Ethiopian universities that encourage cooperative research and innovation. The poor linkage between Ethiopian universities with other development sectors adheres to policy competition rather than cooperation.

With regard to the findings of the study regarding the research and innovation policy of Ethiopian universities, it can be concluded that:

- There is poor engagement in research and innovation and a poor research culture.
- There are extremely limited research output dissemination trends from a few universities.
- The research output has no local and global applicability.
- There is no experienced research staff.
- There are extremely limited and fragmented international research alliances based on individual efforts
- Institutional research policy gaps for cooperative development–research cooperation between universities and other development sectors and industries were the major policy limitation observed regarding the research and innovation policy at Ethiopian universities.

In the light of the results of this study, Ethiopian universities are urged along with policy makers to revisit higher education research and innovation policy to respond to the local global knowledge demand.

6.3.4 Responsive policy in socio-economic transformation

Higher education plays a role in the socio-economic transformation that can be measured regarding local development engagements. The term maxim ‘thinking and local acting’ in higher education context can be realised if higher education operates with regard to their respective local endeavours. Universities, as research and technology innovators, should serve the community with research and technology through technology dissemination that foster locals development, which in turn, fosters global and local integrity.

According to the findings of this study, Ethiopian universities’ local engagement is extremely limited and insignificant.

- Universities act in local development through different approaches with insignificant contributions, revolving around short-term training for a sector such as education and business organisations.
- The study participants confirmed that there was no defined policy in place for Ethiopian universities’ community services or local development engagements.
- Among the sampled universities the Jimma, and Mekelle Universities had better local engagements to transform socio-economic conditions of the community in the vicinity. So far, only one university, namely the Jimma University, came up with its institutional philosophy, ‘We are in the community.’
- Jimma University is known for linking student teaching-learning projects with local community demands. Moreover, Mekelle University has improved the dry land farming system in the local community as a local engagement project among Ethiopian universities.
- The Addis Ababa University, the oldest and most established university in Ethiopia, has made a significant scientific contribution, but its local engagement is poor.

- An official document report shows that in Ethiopian higher education, community service or local engagement is emerging as a third mission, next to teaching-learning, research and innovation.
- The linkage in research output dissemination for local development especially in terms of agriculture and technology dissemination to local farmers is still far removed from the current local needs.

As a concluding remark regarding the socio-economic transformation of Ethiopian universities; it is apt to quote the words of a study participant: *‘Our farmers were there as they are now.’* Although the university exists in society, among the agricultural sector, it has not played a role in the socio-economic transformation. The study confirms that apart from the teaching-learning process, no significant contribution was made by Ethiopian universities in socio-economic transformation.

6.4 RECOMMENDATIONS FOR FUTURE PRACTICE

From the analyses carried out in the study, there is a policy gap in Ethiopian universities with regard to responding to the current local and global knowledge economy. To cope with the current global knowledge economy, one of the findings of the study urges Ethiopian higher education to revisit policies in teaching and learning and research and innovation to respond to the global knowledge economy. Based on the findings of the study, practical recommendations are made for Ethiopian higher education policy makers and the universities. According to the literature covered in the study, it is evident that internationalising higher education and local and global development scanning are means for responding to globalisation discourses.

Generic recommendation:

- Ethiopian higher education policy makers should scan local and global development policies. This should be done at national level to balance the current global and local knowledge economy.

- Internationalising higher education policies can be done at an institutional level based on a local and global policy analysis or scanning. In this regard, internationalising higher education implies standardising the curriculum, ensuring the quality of the programme, of global-oriented graduates, of professors engaged in teaching-learning and research and innovation to respond to both the local and global knowledge economy.

Specific recommendations:

- Ethiopian universities should frame their institutional policies in line with the government’s development policy (local development policy)
- Ethiopian universities should design policies according to manpower demand approaches for both local developments and global markets.
- Ethiopian universities should internationalise university teaching-learning and research and innovation based on their programme specialisation.
- Ethiopian universities should design graduate placement and programme quality assessment policies. The researcher proposes a model for higher education policy development in line with the current local and global knowledge economy.

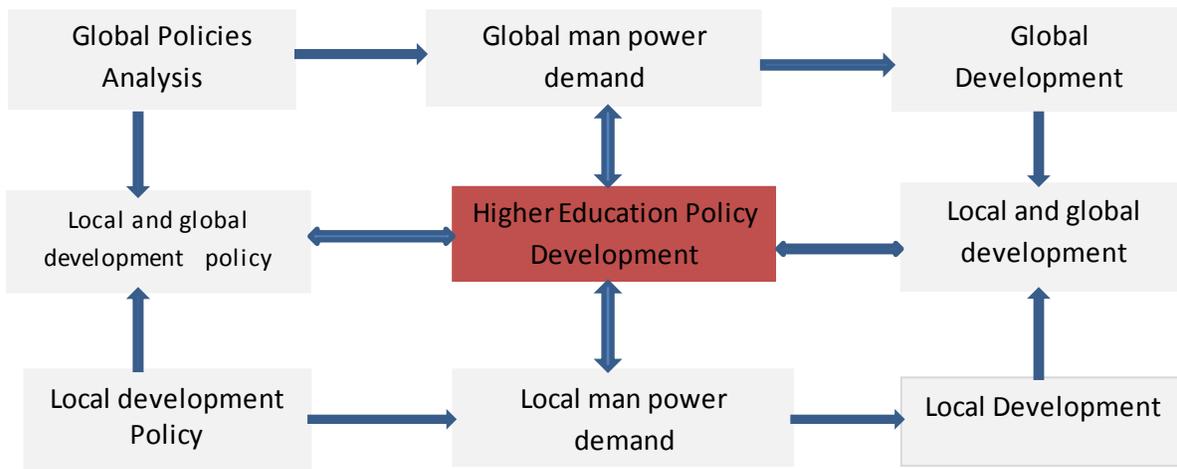


Figure 6-1: Higher education policy development in the current global knowledge economy

The model in Figure 6.1 demonstrates how Ethiopian universities should adapt their policies in line with current global knowledge demands. According to this model, the local and global development policies are the basis for higher education policy formulation. In all the steps, higher education is seen as not only a knowledge producer but also evaluator of the impact of knowledge produced for global and local applicability. The model further depicts the manpower demand for both local and global demands, which, in turn, provides opportunities for graduate global placement. The model further shows an analysis of balanced local and global development policies that concern higher education institutions. The curriculum of higher education should be developed with global content to involve international students and professors for their global knowledge share. Thus, the researcher believes that Ethiopian universities should develop their institutional policy model according to the model in Figure 6-1.

6.5 FURTHER RESEARCH AND METHODOLOGICAL REFLECTION

The current global knowledge demand policy in line with higher education policy seems a fertile area of research that needs vibrant researchers of education policy in general and of higher education policy in particular. Therefore, the researcher forwarded future research areas and appropriate research methodology that needs a strong theoretical base for an inter-subjective approach to knowledge generation and the complementarity research paradigms.

6.5.1 Future research

The study of the globalisation impact on higher education policy is an essential research approach especially for developing countries in general and Ethiopia in particular. Currently, the Ethiopian government is engaged in higher education expansion policies. However, its policy viability with regard to the current global knowledge economy is not thoroughly articulated. On the other hand, the forces of globalisation are affecting the nation state with regard to formulating their national development policy under the umbrella of global policies.

Higher education as a nation-state development sector exhibits a more open system with regard to global forces than other institutions. Therefore, higher education as a knowledge producer and

disseminator, should analyse higher education policies in line with balanced local and global knowledge economy development. As different sources reveal, the internationalisation of higher education is evidenced as a means of responding to the impact of globalisation. There are measurements of internationalisation of higher education with regard to responding to the global impact. However, no exhaustive research is done in Ethiopian higher education areas or universities within the principles of higher education internationalisation.

Thus, the researcher calls for research on Ethiopian higher education policy to measure the extent of Ethiopian universities' engagement in internationalisation in response to globalisation.

6.5.2 Researcher methodological reflection

Higher education policy study is somewhat complex and controversial. Policy study rationality differs from other disciplines as it uses various approaches to grasp the reality at hand. It requires a close analysis of documents, interviews and focus discussions with policy makers, measuring the satisfaction level or agreement of implementers and users searching the latest data of higher education graduates, employment opportunities at local and global levels, trends or research outputs and innovations. To generate data applicable for studying higher education policies, rigorous procedures are employed. The nature of the data is both quantitative and qualitative and complementary to one another. This is why the researcher employed a mixed- methods approach to conducting the study. To validate higher education policies, a strong theoretical base with an inter-subjective approach to knowledge generation and the complementarities of methods is needed. This is at the root of the paradigm assumption for the use of a mixed- methods design.

This study entails looking at Ethiopian universities policies in line with the globalisation impact discourses. Therefore, the researcher recommends the same methodological approaches for the generalisability of Ethiopian universities' policy responsiveness to the current local and global knowledge economy.

6.6 CONCLUSION OF THE STUDY

The focus of this study was to look into Ethiopian higher education policy responsiveness in the light of current globalisation discourses. To link basic research questions with the intended objectives, different sources on the globalisation policy and its impact on higher education were synthesised. Accordingly, scholarly reviews revealed the realities of the effect of globalisation on the policies of nation states in a multi-dimensional way.

Economic and cultural globalisation is impacting the way higher education institutions are operating in a new era of globalisation. As higher education is a more open system than other institutions, it is difficult for higher education of one's nation-state to escape from the impact of globalisation. The literature confirmed that higher education in terms of the globalisation discourse was accepted for human capital formation as a major driver of the knowledge economy. As a result, transformative higher education with a transformative global policy for socio-economic transformation is needed for balancing the local and global knowledge economy.

Regarding the emerging demands of the global knowledge economy, the institutional policies of Ethiopian universities need an investigation on policy responsiveness in both the local and global knowledge markets, as well as the research and innovation and harmonisation of institutional policy in terms of globalisation perspectives. The study is expected to fill the gaps observed and find a new compatible policy direction for Ethiopian higher education institutions. In the light of the realities of globalisation impacts, the basic research question was: *“To what extent have universities in Ethiopia responded to the demands and realities of the local and global knowledge economy?”* To answer this research question, the literature review devoted in chapters one, two and three framed the study approaches to obtain holistic empirical data pertaining to Ethiopian universities policies and practices.

The findings of the study on a review of the related literature concludes that in the global knowledge economy, the role of higher education and the nature of universities within it, need changing its policies and practices and systems, with respect to local and global contexts towards a distinctly new global model of higher education.

The current reviews confirm that the development of Ethiopian higher education propagated three different policy ideologies from the 1950s to the 1990s in accordance with the three different political ideologies of the country. In this regard, the development of Ethiopian higher education basis was inclined with Western higher education policies until 1974. From 1974-1991 Ethiopian higher education policy was inclined to communist policy ideologies, with an extremely limited expansion policy. From 1991, Ethiopian higher education development came up with new policy landscape in line with the government development policies and programmes and the developmental state policy.

The literature review explored in this study shows the criticality of the globalisation impact on higher education policies and trends with regard to Ethiopian higher education development with different policy exposures. During the last two decades, higher education expansion, programme diversification and graduate mix policies and curriculum standardization and the Bologna processes are among the new reform policies endorsed in Ethiopian higher education.

The massification of Ethiopian higher education is driven by the government's developmental state policy. The expansion policy has made considerable achievements in university expansion and higher education enrolment. From the empirical study regarding the responsiveness of Ethiopian universities to the current global knowledge economy, the study reveals that responsive higher education expansion and graduate mix policies formulated for local knowledge demand reveal tremendously increased enrolment with a short period of time. Due to the increased enrolments and number of graduates, the main challenge of the country in near future will pertain to issues of knowledge marketisation at international level. In this regard, a graduate mix policy influencing the proportion of enrolment in science-engineering and technology with no clear manpower demand analyses for local and global employment opportunities, the quality of graduates and programme quality viability are the challenges that the country will face in the near future.

The findings of the study confirm that poor responsive policies in research and innovation, socio-economic transformation, programme quality and graduate employment opportunities are important for responding to the current global knowledge economy. The study concludes that

there is a wide policy gap at Ethiopian universities in knowledge production and dissemination in research and innovation responding to the demands and realities of the local and global knowledge economy.

Consultation of different sources on Ethiopian higher education shows that expansion policy in Ethiopia is understood as a social demand policy for political stability. According to the findings, Ethiopian universities are not playing a role in socio-economic transformation in line with the local needs. The study shows that the trends with regard to research and innovation for local applicability and global knowledge sharing are insignificant. In today's global context, the Ethiopian universities policies and practices in knowledge production and dissemination and socio-economic transformation should be revisited.

Based on the findings of this study, recommendations along with models of higher education policy formulation are proposed for policy makers and higher education institutions. This study ends with suggestions for directions in future research on higher education policies in line with the global knowledge economy and methodological reflections on the validity of the study.

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APPENDICES

University of South Africa College of Education

Appendix A: Questionnaire for Ethiopian Universities

Purpose

This questionnaire is designed to collect relevant information about your views on policy and practices of your institution in response to the current global discourses in globalisation. Your response to the items of this questionnaire will remain confidential and the results will be used to examine the existing policy practices of public higher education in Ethiopia. I hope you will be able to take time and carefully complete this questionnaire. You can use an “x” mark to indicate your responses for items with alternative responses. Please briefly state your responses for the open-ended items.

Thank you for your time.

The Researcher

Section 1: Background information

1. Name of your University: _____
College /Faculty/Institute: _____
2. Gender: Male: _____ Female: _____
3. Educational Qualification
BSc/BA: _____ MA: _____ PhD: _____
4. Academic Rank
Lecturer : _____ Assistant Professor : _____ Associate Professor : _____
Professor: _____
Other /Please specify: _____
Postgraduate students (MA/PhD)_____

Section II. The conceptual understanding towards realities of globalization in higher education context

Indicate your level of agreement on features of globalization in context of higher education; Put x mark on level of agreement as :(1=Strongly disagree,2= Disagree , 3= Neutral to the concept, 4 = Agree, 5= Strongly agree)						
S/n	Please indicate to what extent you agree on features of globalization	1	2	3	4	5
2.1	Expansion in international cross border education					
2.2	All nations have equal opportunities in the international higher education market					
2.3	Growing dependency of higher education institution at international level					
2.4	A better understanding of globalization and global trends can enrich higher education curriculum.					
2.5	Globalization changes how higher education operates					
2.6	Higher education can play a positive role to educate global citizens who can create a better world for all					
2.7	Positive global relationships among academics may assist in advancing research, science and innovation					
2.8	In a globalized world, more opportunities are created for students to gain internationally recognized qualifications					
2.9	Sharing resources globally plays a great role to address national and global problems and to address future economic needs					
2.10	Hosting or participating in international conferences enhances the global reputation of universities					
2.11	Higher education institutions are ranked globally and this affects the international reputation of the institution					
2.12	Ability of students to study from anywhere in the world					
2.13	Ability of professors to teach from anywhere in the world					
2.14	Internationalization is becoming more mainstream in higher education agenda					

2.15	Global nature of higher education is affecting Ethiopian higher education policies					
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2.16 Do you think that globalisation affects Ethiopian higher education policy??

Yes

No

If yes, please specify/explain how?

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Section III. Extent of Ethiopian Universities Responding to Local and Global Knowledge

Indicate extent of your institution policies in teaching learning in response to globalization. Put 'x' mark on level of attempts as (1=to a very less extent, 2= to a less extent, 3=to be a medium extent, 4=to a great extent, 5= to a very great extent)		1	2	3	4	5
3.1	Responsive policies in place for monitoring of its curriculum standards from international dimensions					
3.2	Study abroad and student exchange programs					
3.3	Advancement of distinctive institutional mission and priorities					
3.4	Alignment with state and system policy requirements					
3.5	Institutional policy design, monitoring and implementation of academic disciplines with inherent international standards					
3.6	Responsive policies in internationalization management of bilateral contracts and agreements in recruitment of international students					
3.7	Responsive policies in internationalization management of bilateral contracts and agreements in recruitment of international professors					
3.8	Responsive policies in place to ensure diversity of local and international student representation					
3.9	Responsive policies in standardizing teaching learning outcomes across all programs					
3.10	Responsive policies for standard post graduate program for international students					
To what extent do you think the following actors are playing a role in standardizing Ethiopian higher education to reach a global level:						
3.11.1	The Ethiopian Ministry of Educations					
3.11.2	The Ethiopian Higher education strategic centers					
3.11.3	Donor organization and advisors at Ministry of Education in Ethiopia					
3.11.4	The Ethiopian Higher Education chief officers/presidents					
3.11.5	The Ethiopian Higher Education Relevance and Quality Assurance					
3.11.6	The Ethiopian Higher Education Academic staffs					

3.11.7	UNESCO, Ethiopia Center					
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3.12 Do you think that Bologna process has an impact on Ethiopian higher education policy?

Yes No

If yes, please specify/explain how?

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3.13 Do you see Bologna process creating opportunities for Ethiopian higher education?

Yes No

If yes, please specify/explain area of opportunities

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3.14 Do you think that Bologna process has an impact on current global knowledge convergence?

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3.15 Did your institution get a regional ranking in the top 100 higher education institutions in Africa in the last three years (2011-2014)?

Yes No

If no, please specify/explain why

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3.16 Did your institution get a global ranking in the top 100 higher education institutions in the world in the last three years (2011-2014)?

Yes

No

If no, please specify/explain why?

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Section 4. Attempts of institutional policy in follow up graduate profile in response to global local employment opportunities

Indicate extent of applicability of your institution in follow up of graduate profile in response to global employment opportunities. Put “x” mark on level of applicability as: (1=not applicable at all, 2= not applicable , 3=to some extent, 4=Applicable,5= highly applicable)		1	2	3	4	5
4.1	Responsive policies for campus-wide graduate competence for global world of work					
4.2	Responsive policies to state and market priorities at global level					
4.3	International oriented policies in disciplines/ courses which are primarily focused on global labor market					
4.4	Responsive policies for tracer study of graduate profile in global placement					
4.5	Responsive policy for global academic progress and ranking setting of graduate students					

4.6 Do your institutions have a graduate placement follow up policy?

Yes

No

If yes, please specify/explain the most demanding area or disciplines in which graduates got an opportunity in global employment

Agriculture	<input type="text"/>	Technology	<input type="text"/>
Health	<input type="text"/>	Business	<input type="text"/>
Education and Social Science	<input type="text"/>		

If no, please specify / Explain problem

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Section 5 V. Applicability of institutional policies in local development for socio-economic transformation

Indicate your extent of your Institutional Policies in Local Development applicability in response to globalization; Put “x” mark on level of applicability as: (1=not applicable at all, 2= not applicable , 3=to some extent, 4=Applicable, 5= highly applicable)		1	2	3	4	5
5.1	The institution has a policy and procedure in place for engaging with the local community					
5.2	The institution has policies that encourage departments and staff to develop and implement strategies for community engagement					
5.3	The institution has policies encourage students to engage with local communities through their academic work					
5.4	The institution has policies of teaching-learning attachment with local socio-economic development					
5.5	The institution has responsive policies in place to disseminate information on its community engagement to the local development endeavors					
5.6	The institution has responsive policies in place to offer relevant short courses to the community needs and supporting identified economic opportunities.					

5.7	The institution has responsive policies on local development enterprises					
5.8	Responsive policies in place to make its facilities to the local socio-economic development activities.					
What is the applicability of your institutional local policy with in development sectors at local level? responsive policies towards knowledge of the interrelatedness of local development endeavors						
5.9	Linkage in local agriculture and rural development					
5.10	Linkage in local urban planning and development					
5.11	Linkage with natural resource and environmental protection at local level					
5.12	Linkage with health extension services					

5.13 Is your institution currently involved in any local development in response to global development endeavors?

Yes No

If yes, please specify/explain area of local development sectors such as /agriculture/health/education/technology/business

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Section 6. Applicability of institutional research and innovation policies in response to globalization

Indicate the extent of your institution in research policy applicability in response to globalization. Put x mark on level of applicability as; (1=not applicable at all, 2= not applicable , 3=to some extent, 4=Applicable , 5= highly applicable)		1	2	3	4	5
6.1	The Institution has a research and publications policy relevant to international standards					
6.2	The institution has responsive policies in place for yearly international conference hosting and knowledge dissemination					

6.3	The institution has responsive policies for development of knowledge society via research output					
6.4	The institution has responsive policies in place for international professor recruitment in research activities					
6.5	Responsive policies in place for involvement of staff in international research collaboration					
6.6	Responsive policy in research international researchers/professors / recruitment					
4.7	Responsive policies in student mobility in international research collaboration					
6.8	Responsive policy on university -industry research and technology development					
What is the applicability of your institutional research policy within development sectors at international level? Responsive policies towards knowledge of the interrelatedness of local, global, international trends and systems?						
6.9	Responsive policy collaboration in agriculture research					
6.10	Responsive policy collaboration in health research					
6.11	Responsive policy collaboration in education research					
6.12	Responsive policy collaboration in business research					
6.13	Responsive policy collaboration in technology research					

6.14 Is your institution currently involved in any international alliance in response to global research activities?

Yes No

If yes, please specify/explain area of research alliances in sectors such as agriculture/health/education/technology/business or others

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Would you evaluate the number of international research projects conducted in your institution annually in sectors such as:

Agriculture

Technology

Health

Business

Education and Social
Science

If no, please specify/explain problem

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**APPENDIX B: FOCUS GROUP DISCUSSION GUIDELINES FOR KEY PARTICIPANTS OF
ETHIOPIAN UNIVERSITIES**

1. How do you explain globalization in the context of higher education?
2. How do you explain the maxim, '*Thinking globally, acting locally*' in higher education context?
3. How do you evaluate Ethiopian higher education policies in response to globalization in teaching-learning?
 - implementation of modular approach from global perspectives (Bologna approach)
 - ICT for global knowledge convergence
 - research and technology transfer
 - local engagement
4. Do you think that graduates of Ethiopian higher education have an opportunity to secure global placements?
 - Quality & global placement
5. How would you evaluate the Ethiopian higher education policies and practices at glance from globalization perspectives?
 - 30/70 graduate mix policy
 - Massification and program diversification
 - Academic governance

Research Ethics Clearance Certificate

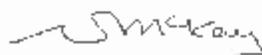
This is to certify that the application for ethical clearance submitted by

TT Olkaba [53341503]

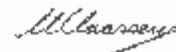
for a D Ed study entitled

Globalisation and its impact on Higher Education policy in Ethiopia

has met the ethical requirements as specified by the University of South Africa
College of Education Research Ethics Committee. This certificate is valid for two
years from the date of issue.



Prof VI McKay
Acting Executive Dean : CEDU



Dr M Claassens
CEDU REC (Chairperson)
mc.dtc@netactive.co.za

Reference number: 2014 OCTOBER /53341503/MC

22 OCTOBER 2014