

ETHIOPIAN PUBLIC UNIVERSITIES GRADUATES EMPLOYABILITY ENHANCEMENT AT THE LABOR MARKET: POLICIES, STRATEGIES, AND ACTIONS IN PLACE

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ABSTRACT

Graduate employability enhancement is becoming a high priority in Ethiopian universities. Significant numbers of students are facing difficulty in getting employment in the labor market. This study examined the extent of graduate employability enhancement policies, strategies in place, and actions taken. For this purpose, a mixed research approach was employed, where six public universities and twelve industries were selected randomly and purposively respectively. A total of 324 final year students and 121 instructors were randomly selected from the public universities using simple random and comprehensive sampling techniques respectively. Additionally, six presidents, four career center heads, and 12 department heads were included purposively for the study. A total of 154 employers were randomly selected and 18 long-time unemployed graduates were contacted. Moreover, two heads of professional associations and seven industry heads were included in the study. The data were collected through questionnaires, interviews, document review, analyzed using descriptive statistics and thematic content analysis techniques. The findings of the study indicated that although there are various policies and strategies in place to address employability both in higher education and in the labor market, there is lack of coordination and integration between the education system and the labor market as well as poor actions. Finally, the study concluded that the policies, strategies, and actions in place were not satisfactory to enhance the employability of the graduates. Thus, policymakers in higher education and the labor market should work cooperatively to improve the design and integration of effective policies and strategies that can enhance graduate employability.

Keywords: Employability, Labor Market, Employability Enhancement, Graduate Capital.

INTRODUCTION

Different international, regional, and national policies and laws support employment and employability of graduates. Universal declaration of human rights considered the agenda

of employment and employability. In article 23 and article 25, it states that rights include free choice of employment, protection against unemployment, and the right to security in the event of unemployment (UN, 1948). Similarly, the Middle East and North Africa regional and national labor laws regulate interactions between employers, employees, and between their representative organizations: unions and employers' associations (Angel-Urdinola & Kuddo, 2010). Similarly, the Sustainable Development Goals (SDGs) also aim to achieve the goal of decent work for all women and men by 2030. According to SDGs number 8, it promotes sustained, inclusive, and sustainable economic growth through full and productive employment and decent work for all (UNDP, 2015). In Ethiopia, different laws such as the Federal Democratic Republic of Ethiopia (FDRE) constitution, Industrial Development Strategy (IDS) (2003), the National Employment Policy and Strategy (NEPS), and Labor proclamation (2003) support employment and employability of graduates. For example, the FDRE constitution, under article 42 puts clearly that "the state shall undertake all measures necessary to increase opportunities for citizens to find gainful employment" and right of labor in article 43 (FDRE, 1994). In general, the international, national, and regional laws support the employment and employability of the labor force.

The government of Ethiopia has invested a large amount of money, 42% of total education budget on higher education in the past two decades with the expectation of a high return from it (World Bank, 2016). However, graduates able to repay the money if they can find or create jobs and earn a sustainable living. To ensure this, graduates should be competent enough either to be employed or create their own job in the labor market. Furthermore, the increase in enrollment of students due to the implementation of 70: 30 program mix direction, the increase of graduate unemployment, and the low success of graduates in the world of work in engineering programs call for empirical study. More specifically, the current study was concerned with the graduate employability enhancement practices and policies of engineering graduates in Ethiopian public universities and Labor market. As well, the skills, knowledge, and personal attributes the graduates possess have always been questioned by parents, employers, and customers. The study focused on higher education because of the fact that currently higher education graduate unemployment and low success in the labor market is increasing and becoming a serious problem in the Ethiopia. For instance, as shown in Figure 1, the share of graduate unemployment relative to total unemployment increased from 2.6 % in 2014 to 6.61% in 2018 in Ethiopia (CSA, 2018).

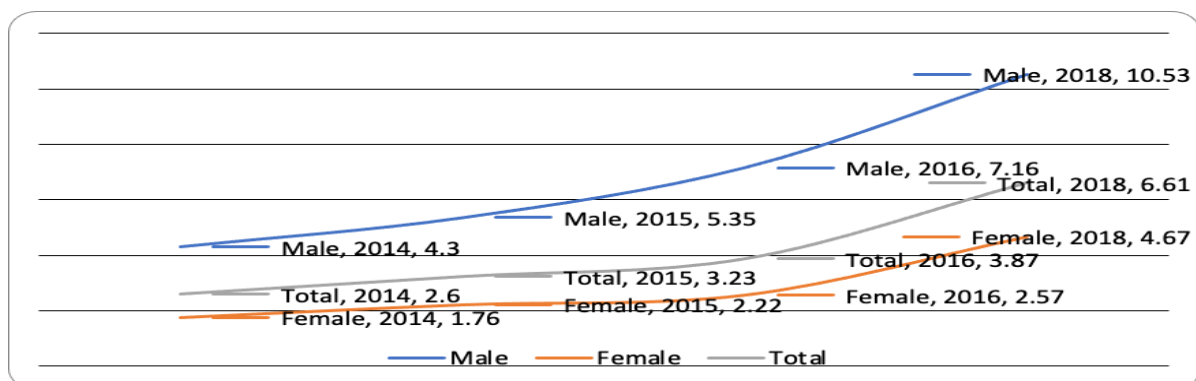


FIGURE 1
TRENDS OF GRADUATE UNEMPLOYMENT RELATIVE TO TOTAL UNEMPLOYMENT

(Source: Survey report on urban employment and unemployment 2014 (p. 232); 2015 (p. 237); 2016 (p. 237); 2018 (p.240).

Moreover, the study also specifically focuses on selected engineering fields, i.e. civil, mechanical, and electrical, because the graduate unemployment in these fields is relatively higher than other fields. For instance, out of 1,170,294 unemployed youths, 76,986 (43 %) are graduates from engineering and allied services (CSA, 2018) and unemployment of engineering is becoming the concern of students, parents, and government. It is claimed that there are few studies conducted at national level in the area, thus, there is a lack of documented evidence and standardized practice about graduate employability enhancement in public universities of Ethiopia. Therefore, it is very imperative and sensible to study the employability enhancement practice of higher education institutions because unless the graduates are prepared to be employable, they will not be competitive, employed /self-employed and productive in the world of work. Therefore, the purpose of this article was to examine the extent of implementation of policies, strategies, and actions in place to enhance graduate employability. Consequently, the study is guided by the following basic questions;

1. How policies and strategies in the education and labor market address the issue of graduate employability?
2. What kinds of strategies and actions considered by universities and industries to enhance graduate employability?
3. To what extent are policies, strategies, and actions implemented to enhance graduate employability?

This paper draws upon those contributions to suggest some recommendations to policymakers in education and labor market about the policies, strategies and actions taken to enhance graduate employability, and provide a convincing rationale to supports this effort, especially from the higher education point of view. The paper is structured as follows: it briefly presents the review of literature, research methodology, study findings, discussion and, finally the conclusion and implications.

REVIEW OF RELATED LITERATURE

What is Employability?

Employability is a difficult concept to define – it is a multi-dimensional concept, and there is a need to distinguish between factors relevant to obtaining a job and factors relevant to the preparation for work (Little, 2001). Hillage & Pollard (1998) defined employability as having the capability to gain initial employment, maintain employment and obtain new employment if required give the most general definition of employability. From employer's perspective, employability is the capability of a graduate to display attributes that employers predict which will be necessary, for the effective functioning of their organization in the future (Harvey, 2003). Employability from the view of universities is about producing graduates who are capable and able, and these impacts upon all areas of university life, in terms of the delivery of quality and relevant academic programs and extra-curricular activities and employability development opportunities. More clearly, there are various contending issues about employability. People consider it just as assuming any job in the labor market like employment or underemployment. Others consider it as a lifelong process of developing skills, knowledge, and attitude to have better employment opportunities. However, employability is a lifelong process and it applies to all students whatever their situation, course or mode of study. There are also misconceptions about what employability is not. For instance, employability is not about replacing academic rigor and standards, it is not necessarily about adding additional modules into the curriculum, and it is not just about preparing students for employment (Tomlinson,2017; Dacre-Pool and Sewell, 2007).

Hence employability is a fluid and wooly concept, different theories and models were developed to conceptualize, realize, and measure it. Regarding the conceptualization of employability, Forrier & Sels (2003) proposed the employability process model, Christina and Tine (2017) proposed an education framework. Also, Harvey (2003) conducted a qualitative study and come up with different models (magic-bullet employability, development models and audit of employability-development within institutions) of defining and measuring employability and Harvey criticizes the outcome approach of employability measurement. Furthermore, Dacre-Pool & Sewell (2007) proposed a practical model of employability named key to employability model. The more comprehensive model of employability designed by Tomlinson (2017) is the graduate capital model. This model comprises five types of capitals (Namely, human, social, cultural, identity, & psychological) that help graduates acquire employability. As a result, the graduate capital model has strength in considering various employability assets than focusing on a single issue like skills or limited areas of competencies. Overall, these models are context-specific, higher education system and labor market, dependent and have not tested well yet in different higher education and labor market contexts. Consequently, it is necessary to test the workability of these models in different higher education and labor market contexts:

Employability Enhancement Policies and Strategies

The employability enhancement policies and strategies can be designed and implemented at different levels such as macro-levels, meso-level, and micro levels. Macro-levels policies and strategies refer system-wide planning and steering policies, such as skills forecasting, graduate tracking and regulation of study places. Meso-level policies and strategies are designed and implemented at the institution level and examples of such meso-level policies and strategies are developing new types of programs and/or change programs to prepare students better for working life. Micro-level policies and strategies are designed and implemented at an individual level to develop the employability of graduates and workers (Christina & Tine,2017; Rowe & Zegwaard, 2017).

Another set of strategies to boost the employability of students and staff in universities is recommended by Christina & Tine (2017) named as educational framework for entrepreneurship, internationalization, and innovation. According to them, European universities face the challenge of meeting the increased demand for skills of globalized work environments. Therefore, universities need to adapt their educational concepts which involve promoting internationalization, entrepreneurial and innovation skills. Furthermore, they identify relevant sets of skills for internationalization, entrepreneurship, and innovation to meet labor market demand. Overall, Christina & Tine (2017) argued that including the educational concept of innovation pedagogy with a better attention on entrepreneurship education and internationalization into the curricula of university is an important step towards becoming more entrepreneurial. To achieve this purpose, they proposed the educational framework that contributes to the debate on how universities can respond to the growing demand for skills induced by globalization in general, and on enhancing the employability of university students and staff, in particular. Moreover, entrepreneurship skills development is one strategy to enhance graduates' employability. Different studies (like Chienwattanasook & Jermisittiparsert, 2019; Fulgence, 2015; Pardo-Garcia & Barac, 2020) showed that graduates should be encouraged to become more entrepreneurial because institutions can produce enterprising graduates whose benefit skills apply to any employment situation or occupational sector. However, entrepreneurial graduates should be identified and supported because the number of entrepreneurial graduates is very few and all or the majority of graduates cannot be entrepreneurial. Moreover, Abelha et al. (2020) Ma'dan et al.(2020), and

Mgaiwa (2021) also identified strategies like improving teaching methods and programs offered, developing university–industry, aligning university education with a country’s development plans, consistent university curriculum reviews, strong sense of innovation and collaboration, and strengthening quality assurance systems.

In Ethiopia though higher education graduate unemployment and low productivity at work becomes a series problem, the agenda of graduate employability has not been given adequate attention at all levels (Hailemlkot, 2013). Besides, even though graduates employability enhancement is the top issue in various higher education and labor market system. The issue has not not well investigated in Ethiopian higher education and labor market context:

RESEARCH METHODOLOGY

Design of the Study

The current study employed a mixed approach and concurrent design to explore the graduate employability enhancement policies, strategies, and actions in Ethiopian universities and labor market. The mixed approach and concurrent design enable to examine the issue in border scope and in-depth by employing quantitative and qualitative methods at the same-time (Creswell, 2014).

Population, Sampling and Sample of the Study

The population of the study is different actors in both higher education and labor market. The participants in the higher education system were final-year students, instructors, and academic leaders. Out of 3025 (M=2269; F=756) final-year electrical, civil, and mechanical engineering students, the sample size for the survey of 361 was determined by using Yamane’s sample size calculation formula (Yamane, 1967).

$$n_0 = \frac{N}{1 + Ne^2} = \frac{3665}{1 + 3665(0.05)^2} = 361$$

Where; N=Population size, e=margin of error and no= initial sample size

Besides, Individual final-year students were selected by using proportional sampling techniques. However, out of 361 distributed only 324 students’ questionnaire were used for the final analysis. Further, 121 Instructors of final -year students were included in the study by using comprehensive sampling because the number of instructors was manageable. Moreover, 18 department heads, six career center heads (alumina heads), and four vice presidents were included in the study purposively because of the thinking that they work to enhance graduate employability.

Regarding the labor market sampling, 12 industries were purposively selected which employ graduates of electrical, civil, and mechanical engineering. Based on this purpose, a total of 12 industries, four industries in each three regions (i.e., Addis Ababa, Oromia, and Amhara) were selected. These regions are selected because of the larger share of the national economy is concentrated in these regions (ESC, 2016). Like the final-year students, the 251 sample size for employers was determined by Yamane's formula (1967) form the population of 670 employers, i.e. managers, supervisors, and quality controls. Besides, two national level professional association heads in each sector were included purposively. Moreover, 18 2-3years unemployed graduates were also included by using snowball sampling from three regions and graduated from six selected universities. These 2-3 years unemployed graduates are considered based on the assumption that they have recently completed their university education and they were actively engaged in the job-searching. As a result, they had the latest understanding of both the employability enhancement

efforts at university and the current demands of the labor market.

Data Collection Instrument and Procedure

The current study employed different data collection instruments to get the whole picture of the issue under consideration. Besides, the data was triangulated by using different types of data collection instruments such as questionnaire, interview guide, and document review of policies and strategies. Both Self-prepared and standardized questionnaires were used. More specifically, the questionnaires composed of four sections that focused on the practice of employability (41 items), graduate employability capacities (64 items), determinant factors challenges and of employability (44 items) and general information (15 items). The standardized questionnaire was Graduate Skills and Attributes Scale (GSAS), containing 64 items used to measure the employability capacity of final year students. The items of the questionnaires were both open-ended Likert scale items and closed ended items. All the data collection tools were validated as well reliability of questionnaires were assured. Data were collected based on full consent of participants and questionnaires distribution and interview were done on the participants' university and industry in person. As procedure, first a short orientation is given for participants about the study. Then questionnaires were distributed. Finally, they filled the questionnaires and return it.

Data Analysis

Both the quantitative and qualitative data analysis techniques were employed using SPSS 23 and Nivivo 12 soft wares respectively. The quantitative data were analyzed by using descriptive statistics techniques. Besides, the qualitative data were analyzed by content analysis technique.

RESULTS

Policies and Strategies in the Education and Labor Market that Address the Issue of Graduate Employability

Employability enhancement issues have been integrated into various policies and strategies in both the education and labor market in Ethiopia. For instance, in the education system, policies and strategies such as the higher education policy and strategy, the higher education proclamation, education sector development program, and professional and program mix policy have considered employability (See Table 1). Similarly, in the labor market, employability enhancement issues have been also included in the national employment policy and entrepreneurship strategy.

Name	Year	Key Focus areas/ Interventions	Target groups	Main Implementing agency
National Employment Policy and Strategy of Ethiopia	2009	-Promoting job creation in the private sector, public sector, self-employment and entrepreneurship -Improving labor market institutions	Youth Women Disabled Children Migrants	MoLSA National Employment Council consisting of members from various ministries

Education Sector Development Program(ESDP) V (2015 to 2020)	2015	produce competent graduates who have appropriate knowledge, skills and attitudes in diverse fields of study	Students Graduates	MoE
Higher Education Proclamation	2019	prepare graduates with adequate knowledge and skill and appropriate attitudinally maturity	Students Graduates Industries	MoSHE universities Industries
National Entrepreneurship Strategy of Ethiopia	2019	Creating entrepreneurial opportunities for all	Youth Women Graduates Students Industries TVET	Job Creation Commission Universities Schools
Higher Education Policy and Strategy	2020	Address challenges and problems of higher education.	Students Graduates Industries	MoSHE Universities Industries

Higher Education Policy and Strategy (MoSHE, 2020): The Higher Education Policy and strategy is designed in purpose to address challenges and problems of higher education and puts forward the strategies to fill the gaps observed in the higher education system. The higher education policy and strategy have identified eleven major problems of the sector, thirteen policy issues, and several strategies. Among the problem of the higher education sector, the issue of work and employability were also addressed in the document. In relation to employability, major problems identified were :1) Less emphasis on the development of the learner in addressing social, physical, psychological, professional (vocational/occupational), spiritual, and cognitive competencies, skills, and learning outcomes; 2) Mismatch between the demands of the labor market and the national economy and the competence level of higher education graduates; and 3) Failure in identifying early the talents, ability, interest, learning difficulties, and cognitive styles of learners (MoSHE, 2020, p.10). These major problems, directly and indirectly, related to employability enhancement and employment. Moreover, as stated in its vision the higher education policy and strategy focuses on the production of competent graduates. In its words, the vision is stated as "To create a vibrant, sustainably transformed higher education sector that advances the nation in socio-economic, political, scientific and technological developments through the production of competent graduates"(p.14). Furthermore, the policy identified vocational guidance and career counseling as a policy issue and identifies various strategies to implement this policy direction. The strategies involve different issues like preparing and employing career counselors, establishing career centers and career counsel at the national level, and maintain a database for information on job opportunities at each career guidance unit. These strategies set in the policy are proper to enhance students' employability if they are implemented properly.

Higher Education Proclamation (No.1152/2019): This proclamation is primarily prepared based on the existing gaps in quality and relevance and satisfying public demands in producing required human capital. According to the proclamation, the main objective of the

country's higher education system is to prepare graduates with adequate knowledge, skill, and appropriate attitudinally maturity. Furthermore, the proclamation emphasizes the preparation of qualified graduates based on the needs of the country by developing various programs. Moreover, the proclamation showed that the Ministry of Science and Higher Education (MoSHE) should encourage different government and non-government organizations to work in cooperation/partnership with universities in teaching-learning, research, and community service. More specifically article 86, sub-article 12 comprehend as follows "encourage government organs, professional associations, business organizations, and other appropriate persons to work jointly on matters concerning education, training, research, practicum or apprenticeship and research and technology transfer." (p.11515). According to this article, MoSHE is authorized to encourage industries and professional associations their effort to enhance the employability of graduates through education, training, and apprenticeship. To sum up the higher education proclamation focuses on knowledge and skill and attitudinally maturity of graduates.

Further, the higher education proclamation gives high emphasis to the production of high-quality graduates. The emphasis is done by including the labor market actors in board members' composition. Since the board is the top decision-making body, including industry representatives may have a great impact in designing and implementing different work-related meso-level policies and strategies to enhance graduate employability. In addition, the proclamation gives the responsibility for the university president to pledge the production of high-quality graduates based on the needs of the country and this responsibility signifies that the production of highly competent graduates is the top priority of universities. Besides, it enforces the top leaders of universities to focus on employability enhancement of graduates. Moreover, the proclamation has some strategies which can improve the employability of graduates like the joint appointment of academic staffs from industries, business, research centers and other organizations, including labor market actors as board members, and making the president responsible for assuring the quality of graduates.

Undergraduate and graduate degree programs mix and student placement in the expanding higher education system in Ethiopia (MoE&MoCB, 2007): The main focus of this policy/long-term plan is to indicate strategic interventions on planning for annual student intake, total enrollment, and program/discipline mix during expansion. The policy was also supposed to assist in the then execution of the higher education capacity building programs and strategy towards the achievement of its goals. Based on this policy from 2008 onwards, 40% of newly enrolling students were placed in various engineering fields, 30% for the natural science streams, whereas the remaining 30% is left for social sciences and humanities. The reason for this share of the different program/discipline-mixes is primarily related to the demand of the growing economy and ever-changing social sectors to employ and/or assist self-employment of graduates of higher education. Therefore, the strategy is supposed to improve graduate employability by increasing the relevance of the programs in the labor market. However, the expansion policy/ program/discipline-mixes plan forced the majority of students to join science and technology fields and this is a good decision to have large amount of manpower trained in science and technology for national development. However, the policy direction did not adequately predict the capacity of institutions to run these costly programs and the capability of the national economy to absorb a large number of graduates in these fields.

National Employment Policy and Strategy of Ethiopia (NEPS)(MoLSA, 2009): The rationale for the preparation of NEPS is to have a framework that guides interventions for improving employment and its poverty outcomes. The main objective of the NEPS is enhancing social welfare, accelerating economic growth, and achieving political stability. Moreover, the NEPS focuses on demand-side job creation, supply-side job creation, labor

market institutions i.e. the governance of labor market relations and labor market services, and cross-cutting issues. Based on these focus areas (dimensions) the policy actions are divided into four major areas: employment generation, improving labor productivity, improving labor market institutions, and cross-cutting areas in the labor market. Because of their importance for employability enhancement employment generation and improving labor productivity were considered in this study.

Employment creation (demand side of the labor market) is a key to create jobs and economic development. Cognizant of this, NEPS strategy promotes job creation in the private sector, in the public sector, and also in terms of promoting self-employment and entrepreneurship in urban and peri-urban areas. The main strategies recommended in the NEPS are accelerating private sector development for employment generation, ensuring effective and efficient public sector employment, promoting self-employment and support the informal economy, and supporting universal and compulsory education on entrepreneurship (MoLSA, 2009). These strategies have a crucial bearing on employability enhancement.

Regarding the supply side improving labor productivity (supply side of the labor market) various specific policy actions such as skills development, the establishment of different professional associations and ensuring decent working conditions are forwarded. Furthermore, regarding skill development the strategy put that skills are acquired through training on basic and functional skills of production, marketing, asset management including financial assets computer skills, internet skills, and e-commerce lessons. All in all, NEPS has included various issues of employment and employability that focus on both the education and the labor market context.

National Entrepreneurship Strategy of Ethiopia (MoI, 2019): The vision of national entrepreneurship strategy is stated as "Creating entrepreneurial opportunities for all"(p.11). Entrepreneurship helps to improve the employability of graduates. As a result, the presence of an entrepreneurship strategy is very helpful. The strategy document considers enhancing entrepreneurship education and skills development as a strategy. Moreover, the strategy set an objective that helps to embed entrepreneurship in formal and informal education. Furthermore, the strategy suggested building the capacity of Ethiopian universities to develop strategies related to entrepreneurship education. This policy direction is helpful to improve the entrepreneurship mindset and practice of the university community. Besides, the national entrepreneurship strategy considers the development of effective entrepreneurship curricula, proper teachers' training, and partnership with the private sector as a strategy for creating entrepreneurial opportunities for graduates. Moreover, the strategy considers universities in various strategies which enable them to create entrepreneurial opportunities. In general, the national entrepreneurship strategy of Ethiopia is very helpful to enhance graduates' employability by improving entrepreneurial opportunities of students, instructors, and industry personnel.

Strategies and Actions Considered by Universities and Industries to Enhance Graduate Employability

Various strategies were employed to enhance graduate employability in both higher education and the labor-market in Ethiopia. In higher education, designing and implementing a demand-driven curriculum, institutionalizing employability enhancement, work experience/ internships /externship placements, promoting entrepreneurship awareness and skills, and university-labor market linkage were the major strategies. Concerning the labor market, strategies such as partnership with higher education institutions, serving as a training center for both graduates and instructors were some strategies employed to enhance graduate employability. Each of these strategies is analyzed as follows:

Designing and implementing demand-driven curriculum: Literature (Dacre-Pool & Sewell, 2007; Yorke & Knight, 2007) indicated that curriculum is a key to enhance graduate employability. In Ethiopia, nationally harmonized engineering curricula were implemented in sample universities but due to limitations of the harmonized curriculum, universities were preparing their university level new curriculum for different engineering undergraduate programs. According to one of the department head, these new curriculum is better to enhance graduate employability. He puts his idea as follows:

There were some gaps in nationally harmonized curricula because institutions have variations in resources and surrounding opportunities to implement the harmonized curriculum. These gaps also impact employability enhancement when the harmonized curriculum was being implementing. However, in our new curriculum, we tried to include the concerns of all stakeholders (namely students, parents, and employers), and more focus is given to practical aspects both in Universities and industries. These help to enhance students' employability capacity (Department Head, #4, 2020).

Even though the designing and implementing demand-driven curriculum is used as a strategy by both education and the labor market, the document review of harmonized curricula indicates that there was low participation of labor market experts and professional associations. Moreover, the absence of the current and future labor market skills forecast information results in the absence of the necessary competencies in the curriculum.

Institutionalizing employability enhancement: Even though, the main goal of higher education is preparing graduates for the world of work, various studies indicated that universities did not give much attention to the work-life of their graduates. However, currently due to the high unemployment rate and globalization, universities are becoming highly concerned about the employability of graduates. The situations in Ethiopia are also similar to the global circumstances. There are trends of institutionalizing employability enhancement in Ethiopia. More specifically, out of six sampled universities, five universities have an office for career centers and one university-organized career center under the university-industry linkage office. This indicates that there is at least one department or responsible body working on graduates' future work life such as creating employment opportunities, employability enhancement, and building the capacity of staff on the issue of graduates' world of work. However, there are various gaps in institutionalizing employability enhancement such as lack of human and material resources, little focus and support from university leaders and staff, lack of awareness and consensus of stakeholders. In relation to these, one of the career head expresses his idea as:

Establishing career centers and making them functional is a good strategy to enhance student employability by doing different activities. However, working on students' work-life at university is new and not common in our higher education system rather we usually focus on course completion and graduation rate. Therefore, there are awareness gaps in the university community (academic leaders, instructors, and staff). Besides, the center is not staffed with necessary man powers both in quantity and relevance. Moreover, the necessary focuses were not given by top leaders in allotting the budget and supply the career center with the necessary resources. (Career Head #2, 2020).

Industry placement (Work experience/ Internships / Externship): Various studies have shown that industry placement is a key to enhance graduate employability because it creates the opportunity for students to get hands-on experience. Industry placement of students in different industries i.e. internship is another strategy employed by all sample universities. This placement program is included in the curriculum as a single course and usually programmed in the second semester of the fourth year. Documents such as

harmonized curricula emphasize the importance and objectives of the industry placement. For instance, the harmonized curriculum of civil engineering explains the importance and objective of internship as:

The main objective of the internship course is to integrate classroom learning with field experience; gain work experience in the student's career field; provide exposure to advanced skills and knowledge; develop the foundation for workplace competencies; provide exposure to job opportunities and potentials; clarify and confirm career goals, and increase understanding of workplace culture (Civil Engineering Harmonized Curriculum, P.239).

Promoting entrepreneurship awareness and skills: One of the strategies to enhance employability and enable graduates to create their/self-job is enhancing their entrepreneurship capacities awareness and skills. In the sampled undergraduate engineering programs, entrepreneurship is given as a course, and technology institutions have units that are used to encourage students' entrepreneurship capacities. The entrepreneurship courses and activities performed in entrepreneurship units are intended to develop the understandings and capacities of students in their field. For instance, the mechanical engineering harmonized curriculum (ESC, 2013) put the aim of the course entrepreneurship for engineers as "to emphasize entrepreneurship and orientation for self-employment desperately needed in Ethiopian context by weaning away graduates to make them job creators rather than mere job seekers"(p.65). Besides, like the mechanical engineering curriculum, the other two harmonized curricula of electrical and civil engineering also emphasized the importance of promoting entrepreneurship awareness and skills for better employability of graduates.

University-Industry /labor market linkage: university-industry/labor market linkage is another strategy employed by universities to enhance graduate employability. Universities create a good rapport with industries with two main objectives. The first objective is to use industries as the training center for industry placement of students and instructors. The second objective is to create the opportunity for employment for their graduates. The two university-industry linkages i.e. linkage serve as internship placement center and employment opportunity creation has a great contribution to employability enhancement because they give work-based/practical and employment networking opportunities. Besides, universities also run/perform different projects mainly research projects in collaboration with industries. Some of these projects create opportunities for instructors to increase their understanding of the current contexts of the world of work. Regarding the contribution of university-industry /labor market linkage for employability enhancement, participants mainly top leaders and department head highly underlined its importance during the interview with them. A remark made by a vice president participant is indicative of that:

Our university created good linkages with different industries like the sugar industry, Ethiopian airport authority, and Ethiopia electric utility. These industries were served as an internship center for our engineering graduates. Even some of them encourage students to take internship training in their industry by paying stipend. We have also created employment opportunities for our last year's graduates in these industries. Therefore, we mainly use university-industry linkage to increase work skills and create employment opportunities for our graduates. (University president # 4,2020).

The Extent of Implementation of Policies, Strategies, and Actions to Enhance Graduate Employability

Employability enhancement actions that help to enhance graduate employability were in place in the higher education and labor market. The purpose of these employability enhancement actions is to make graduates successful in the labor market. In universities,

employability enhancement actions like opening relevant (demand-driven) programs, improving the quality of education and training delivery (Graduate tracking and surveys), helping graduates to build their career (Career service, guidance, and counseling initiatives), and employer involvement in education and training were performed. Besides, in the labor market, employability enhancement actions such as labor market forecasting, collaboration with HEIs, and professional associations. More specifically, enhancing the employability of graduates requires actions at a different level by different stakeholders like HEIs, employers, students, and professional associations.

Different stakeholders have various roles in taking actions for employability enhancement. In relation to this, study participants were asked to identify the responsible stakeholder for graduate employability enhancement.

Participant	Universities		Employers		Professional		Students		Joint	
	N	%	N	%	N	%	N	%	N	%
Students	88	26.3	41	12.3	28	8.4	20	6.0	154	46.1
Instructors	14	11.3	15	12.1	6	4.8	9	7.3	72	58.1
Employers	20	12.7	23	14.6	8	5.1	6	3.8	99	63.1
Total	122	20.23	79	13.10	42	6.97	35	5.80	325	53.90

As shown in Table 2, half of participants 325 (53.9%) indicated that employability enhancement is the role of universities, employers, professional associations, and students. It implies that participants were aware that employability is a joint- role of stakeholders in higher education and the labor market. Furthermore, participants were asked to rank stakeholders from more responsible to less responsible for graduate employability enhancement.

Rank	Students			Instructors			Employers		
	Stakeholder	N	%	Stakeholder	N	%	Stakeholder	N	%
First	University	121	36.2	University	41	3.1	Universities	52	33.1
Second	Industries	107	32.0	Industries	48	38.7	Professional Associations	58	36.9
Third	Professional Associations	143	42.8	Professional	52	41.9	Universities	47	29.9
Fourth	students	161	48.2	students	62	50	students	69	43.9

Table 3 indicates that all groups of participants i.e. students 121(36.2%), instructors 41(33.1), and employers 52 (33.1%) put universities as the first responsible body for students to take employability enhancement actions. Similarly, all participants put students as the least responsible stakeholders for employability enhancement.

All in all, participants have similar awareness of the role of different stakeholders on graduate employability enhancement. These two findings indicated that all stakeholders are aware that graduate employability enhancement is the responsibility of various stakeholders

and needs collaboration. This finding is consistent with the findings of Fulgence (2015) & Garwe (2014) employability enhancement is done by a collaboration of different stakeholders.

Participants' action in university, industry, and professional associations is crucial for employability enhancement. Different studies indicated that participation in various job-related activities related to the field of study is a key to employability enhancement (Magnell, & Kolmos, 2017; Harvey et al., 2002; Harvey, 2003). As indicated, the majority 248 (74.3%) of students and 87 (70.2%) have not participated as part-time employee/ volunteer/ entrepreneurial/ freelancer in a job related to their current field. On the other hand, only 84 (25.1%) of students and 36 (29.0%) of instructors were involved in different activities of the labor market (see Table 4).

Question		Yes	%	No	%
Have you participated as part-time employee/ volunteer/ entrepreneurial/ freelancer in a job related to your current field of study?	Students	84	25.1	248	74.3
	Instructors	36	29.0	87	70.2
Have you been participated in higher education teaching and learning process as a curriculum developer/guest lecturer/ Project examiner?	Employers	147	93.6	10	6.4
Are you a member of professional associations) in your field of study?	Students	64	19.2	267	79.9
	Instructors	18	24.5	94	75.8
	Employers	18	11.5	135	86.0

Furthermore, instructors also indicated that they participated in different activities such as part-time employment, volunteer, and entrepreneurship. Instructors' participation in the labor market helps them to be aware of labor market requirements that have positive impact on graduate employability enhancement practice.

On the other hand, on the subject of employers' participation in the higher education, Table 4 reveals that 147 (93.6%) did not participate in higher education institutions activities. It implies that employers' involvement in HEIs is limited. This low involvement of employers in the HEIs affects employability enhancement by decreasing the practical attachment of students. Moreover, very few who participated in higher education indicated that they did not engage in teaching-learning learning activities such as curriculum designing, teaching-learning, and assessment.

Concerning to participation of students, instructors, and employers in professional associations, Table 4 depicts that only 64 (19.2%) of students, 18 (24.5%) of instructors and 18 (11.5%) of employers participated in professional associations related to their career. It indicated that the majority of participants do not participate in professional associations as a result they are not aware of about skills, knowledge, and attitude required by their career. However, interviews with department heads indicated that participation in professional associations is not helpful in increasing the awareness and employability of students and instructors. One of the department heads put his idea as follow.

Professional associations are not working in assuring the competency of graduates because this being a member of a professional association is not helpful to employability enhancement. Our participation in professional associations is limited to participate in different kinds of research workshops and annual meetings (Department Head #3, 2020).

Besides, the professional association heads also supported these findings. The two interviewed association heads indicated that professional associations are not actively participated in employability enhancement and assuring the competencies of graduates.

To see the extent of implementation of policies, strategies, and actions, participants of the study were asked various questions that indirectly indicate the implementation of policies, strategies, and actions to enhance graduate employability. The first and important issue is helping/guiding graduates to be employed in the field or department they were interested in. Because this helps the students to build their dream career and participate in employability enhancement willingly.

Who influenced your choice of the current field /department?	N	Percent
Government (MoE)	78	23.4
Myself (personal interest)	217	65.0
My friends pressure	14	4.2
Labor market Conditions	9	2.7
Teachers/Instructors advice	13	3.9
Career Guidance advice	3	0.9
Total	334	100.0

As shown in Table 5, 217 (65%) of students decided their field or department by themselves or based on their interest, and 78 (23.4 %) were influenced by the government. This indicates the majority of students have an interest in the fields and departments and it is expected that they willingly participate in building their future careers. However, 78 (23.4 %) of students were not expected to actively participate in building their future career willingly. On the other hand, only 12 (3.6%) students made their choice based on the labor market and career guidance influence. This clearly shows that very few students were influenced by the labor market and career guidance which may affect their employability. This may be due to the lack of labor market information like the salary, working conditions, career development opportunities in our context. This finding is in line with the findings of Baker et.al. (2018) which labor market information was not a determinant factor to choice a field of study. In addition, participants were asked to rate the purpose of university graduate preparation, i.e. to which type/kind of employment opportunities universities prepare their graduates?

Purposes of university preparation	Students		Instructors		Employers		Total	
	N	%	N	%	N	%	N	%
Employee	194	58.1	76	61.3	29	18.5	299	49.75
Entrepreneur	72	21.6	21	16.9	51	32.5	144	23.96
Freelancer/consultant	24	7.2	9	7.3	30	19.1	63	10.4

Business /project leaders	28	8.4	6	4.8	17	10.8	51	8.49
Employee & entrepreneur	9	2.7	9	7.3	21	13.4	39	6.49
Employee& Freelancer/consultant	2	0.6	-	-	-	-	2	0.33
Employee & Business /project leaders	2	0.6	-	-	-	-	2	0.33
Total	332		121			148	601	100

As shown in Table 6, the majority of participants i.e. 299 (49.75 %) indicated that universities prepared graduates to be an employee in various organizations and 207 (34.44%) of participants indicated that graduates were prepared to be self-employed as an entrepreneur and freelancer. From this one can understand that most graduates dream their career to be employed either in public or private industry. However, different evidence indicated that the industries in the country are not enough to absorb the graduates. Furthermore, the key informants indicated that universities focused on preparing graduates for the national labor market only. In this regard, an industry head clarified his observation as follows,

Graduates must be prepared for not only national labor market but also for regional and global labor market because the national labor market could not absorb all graduates as an employee, entrepreneurs, and freelancer. Our country should also supply other countries with a competent labor force like what the Chinese are doing in Africa (Industry Head #3,2020).

Moreover, all participants were asked about their level of engagement in employability enhancement and career-related tasks. More specifically, students were asked how many hours per course on average spend on employability enhancement and career-related activities.

Participants	Measurement Unit		SD
Students	Hour per course	1.49	1.84
Instructors	Hour per course	3.53	4.08
Employers	Hour per student placed in industry (per course)	8.15	11.76

Table 7 indicates that the main actors in employability development i.e. students spent on average only 1.49 hours for employability-related activities in each course. Similarly, instructors also spent 3.53 hours in employability enhancement activities. On the other hand in industries even though students were supposed to stay 3 to 4 months, a supervisor spent only 8.15 hours helping students to enhance their employability. Since students were placed in industry for a period of one-course duration, the presented mean of hours spend in employability enhancement is comparable. Therefore, employers spend more time on employability enhancement than students and instructors. Given that students are more responsive to enhance their employability than other stakeholders, a closer look at students' engagement in employability is needed. Regarding the participation of subjects in employability enhancement actions, the very low amount of time spent on employability enhancement indicated that the low attention given for future career by students, instructors, and employers. These findings are important because they have shown that low attention

given for employability enhancement.

DISCUSSION

The current study examined the extent of implementation of policies, strategies, and actions in place to enhance graduate employability. The findings of the study indicated that there are various policies and strategies in place to address employability both in higher education and in the labor market. However, there is lack of coordination and integration between the education system and the labor market as well as poor actions. Policies both in the education and labor market (see Table 1) tried to address the need to enhance the employability of graduates. Besides, various strategies were employed to enhance graduate employability both in education and the labor market. However, the extent of the implementation of policies, strategies, and actions to enhance graduate employability is poor.

The most important finding of this study is lack of coordination and integration between the education system and the labor market policies. This finding suggests that employability enhancement was not considered as a multi-sectorial and holistic issue at a policy level. These loose policies could not help to improve the employability of graduates. Besides, poor implementation of employability enhancement strategies indicated that employability strategies were not designed by including the concerns of various stakeholders. Moreover, poor actions are taken by universities, industries and professional associations imply that stakeholders do not properly play their role, and a system of accountability was not established properly. As a result, graduates with low employability are joining the labor market that, in turn, affects the productivity of industries and the sustainable development of the country.

These findings of the current study are in line with various theoretical and empirical studies. For instance, theoretical studies such as human capital and capability theories underline that a work force capital and capability should be built by employing effective strategies (Becker, 1993& Sen, 1992). Besides, empirical studies conducted by Garwe, 2014; Harvey et al. (2002); & Harvey (2003); and Magnell, & Kolmos, (2017) shows that poor policy and strategy implementation of employability enhancement and the need to effective holistic policy and strategy initiatives. Besides, one unexpected result of the study is students took less action and time to enhance their employability than other stakeholders. This result is may be due to low awareness of students about their work-life that could have created starting from primary schools.

As a limitation, this study only considered the employability enhancement of some selected engineering fields in public universities. This limitation affected the generalizability of the study findings to other programs of study. Therefore, future researchers interested in the issue of graduate employability may consider more fields/programs of study, levels of programs (undergraduate versus postgraduate), modalities of program provision (regular, extension, e-learning), private versus public, and considering the current university differentiation (research, applied, and comprehensive). All in all, the findings of this study are important in indicating the policy, strategy, and actions gaps in the employability enhancement of higher education graduates in both public universities and labor market institutions. Besides, the study results are also vital in adding knowledge to the broad field of employability enhancement practices from the perspective of policy analysis in developing country higher education systems and labor market context.

CONCLUSION AND IMPLICATIONS

In conclusion, the extent of implementation of employability enhancement policies, strategies and actions in place is low in both education and labor market. This conclusion has several implications for the education and labor market of the country. First, universities cannot prepare graduates for work and life unless effective policies and strategies designed and implemented at different level. Second, the unemployment and low productivity of graduates will continue to be the nation's problem unless stakeholders (Universities, labor market institutes, industries, and professional associations) take actions on employability enhancement in an integrated manner. Third, Universities, labor market institutes, industries, and professional associations must revise their policies and strategies with the current context to produce and employ productive graduates for national and international labor market.

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The authors have contributed equally to this work. All authors have read and agreed to the published version of the manuscript.

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