

Enhancing Stakeholders' Engagement in TVET Policy and Strategy Development in Ethiopia

Ashebir Tekle^{1*}, Solomon Areaya¹, Getachew Habtamu¹

¹ Department of Curriculum and Instruction,
College of Education and Behavioral Studies, Addis Ababa University, Addis Ababa, ETHIOPIA

*Corresponding Author: ashasn2001@yahoo.com
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Abstract

This study investigates the depth of stakeholders' engagement in the formulation of TVET policies and strategies and assesses the efficacy of awareness-building initiatives in Ethiopia. Anchored in a transformative worldview, this qualitative study utilizes a phenomenological research design and involves 35 participants selected for interviews from 33 organizations, including officials, industry representatives, and TVET deans. Moreover, two separate focus groups comprised of trainers were convened to engage in discussions about the subject matter, and a document analysis was made. The data collection was conducted by the researchers, assisted by a team of five individuals, with one representative from each region. Purposive sampling was employed to select participants. The findings reveal that key stakeholders, specifically the Ministries of Construction, Urban Development, and Tourism, lacked substantive engagement in the policy formulation process. Additionally, some ministerial level and major TVET policy and strategy implementers, like trainers and industries, did not have a clear awareness of the current TVET policy and strategy. Additionally, there is a notable absence of participation from regional agencies, associations, and industries in policy and strategy design. From the total list of 35 interviewed respondents, only 17% were engaged, whereas, from two sets of focus group discussions, none of the stakeholders were engaged in TVET policy and strategy development. The study concludes that Ethiopian TVET policy and strategy formulation suffer from insufficient stakeholders' involvement and fragmented awareness initiatives. It is inferred that there is an imperative for the Ministry of Labour and Skills to foster awareness and dialogues at both the federal and regional spheres, incorporating feedback from pivotal stakeholders for future policy refinements.

1. Introduction

Education is a crucial foundation for personal and national development, fostering critical thinking, problem-solving, and constructive engagement. It equips individuals with the tools to tackle future challenges, laying the groundwork for a resilient society. Inclusive education systems ensure every individual contributes to the nation's prosperity, promoting innovation and understanding of cultural diversity. Education fosters social cohesion and encourages dialogue, building inclusive communities capable of addressing global challenges. Continuous investment in education enables a generation of enlightened leaders, innovators, and citizens for sustainable development, prosperity, and peace. Within this framework, the significance of Technical and Vocational Education and Training (TVET) is undeniable. TVET is designed to give people the knowledge and

skills that open doors to higher living standards and steady job growth. As per UNESCO (2021) TVET is a key component of the education system that seeks to cultivate proficient employees for a nation. TVET should be seen as the ultimate solution for economic development and the decrease of unemployment in developing countries. Concisely described by Mulder (2017) as "applied learning", TVET institutions stand as reservoirs of adept labour, poised to spearhead sustainable development challenges. Recognising the swiftly changing economic and societal landscapes, the urgency for professionals possessing robust employability skills becomes evident. Both developed and emerging economies concur that TVET aids vocationally-inclined individuals in acquiring positions ranging from semi-skilled to specialised roles. Moreover, TVET endows individuals with indispensable 21st-century proficiencies, such as critical thinking, collaborative prowess, entrepreneurial spirit, and effective communication (MoSHE, 2020). Salleh and Sulaiman (2020) further highlight the importance of TVET system and the necessity of implementing interventions that align with the demands of the 21st century 'new economy' skills. They also acknowledge that obstacles will inevitably arise, impeding the effective preparation of future skills demands.

TVET has played a vital role in tackling socio-economic issues in Ethiopia, guided by various policies, strategies, and operational guidelines. While the tradition of skill transmission dates back to ancient informal practices, the formal inclusion of TVET in Ethiopia's educational schema surfaced post the 1940s, a response to the post-Fascist Italy invasion era's technical demands. Subsequent decades witnessed comprehensive high schools offering diverse vocational training modules such as electricity, woodwork, metalwork, automotive technology, home economics, and commerce in parallel to academic studies adopted from United States of America (Solomon, 2016).

In 1972, a comprehensive study known as the education sector review (ESR) was initiated with the aim of overhauling the education system. This study yielded valuable recommendations. Upon the government's announcement of the implementation of the scheme outlined in the ESR document, teachers, students, professional associations, and prominent community members expressed their opposition to the scheme. They argued that the scheme was conducted in a secretive manner, without public deliberation, and that certain key recommendations were not acceptable to the main stakeholders, namely teachers, students, and professionals (Tadesse et al., 2022). With the coming of the Military government in Ethiopia in 1974, the education system was restructured in line with a socialist system, Polytechnic education, adapted from the then Soviet Union and East Germany, which was effected in the mid-1970s to early 1980s. The restructuring of the education system, also vocational training, in socialist orientation was fully a political decision devoid of critical public scrutiny by involving all concerned stakeholders to make it relevant to the nation's needs. Although the polytechnic reform gave vocational training equal status with general education, it was not able to curb the rampant unemployment of vocational education graduates, like that of the 1960s reforms, primarily because of the mismatch of vocational programs with the socio-economic reality of the country. A comprehensive study titled "Evaluative Research of the General Education System (ERGESE)" was initiated in early 1983 with the aim of reforming the education system in order to address the prevailing circumstances. The results indicate that nearly all subjects were inadequately presented, exhibiting a lack of clarity, coherence, and consistency. Students demonstrated a lack of comprehension regarding the objective of education, while teachers expressed dissatisfaction with their job. The study's recommendations were not put into effect due to the government's overthrow prior to the public release of the results (Fekede & Ketebo, 2023). Subsequently, in 1994, a new Ethiopian and Training Policy was developed, marking a significant shift in the country's approach to education reform.

The 1994 Ethiopian Education and Training Policy heralded a paradigm shift in vocational education strategy, emphasising TVET's critical role in the nation's human resource development strategy. The Ethiopian government has emphasised the significance of TVET in implementing their growth and transformation agenda. They have made substantial investments in financial and human resources to enhance the accessibility, quality, and relevance of TVET programs (MoE, 2018). Despite its practical benefits, the education and training strategy implemented in 1994 faced criticism due to its perceived "top-down" approach, which lacked public scrutiny and failed to involve all important parties at the time (Fekede & Ketebo, 2023). This 'top-down' training policy reduced the status of TVET, which, during polytechnic education, was at equal status with general education, where high achieving students enrolled to a scheme where students who failed to join college preparatory high schools were assigned to pursue TVET. The 1994 education and training policy introduced the apprenticeship-based industrial attachment scheme where TVET students visit industries to gain firsthand practical experience in real work setting. The apprenticeship-based industrial attachment scheme, however, was not effective mainly due to lack of cooperation of employers, as they were not consulted in the policy development process (MoE, 2008). Important stakeholders such as employers' (industries) involvement in the course of effecting vocational schemes at TVET institutions was minimal, limited to commenting on training modules involving few experts from the industries (Solomon, 2016). The vocational training was supply-driven and focused more on coverage and completion rather than the competence needs of the workplace the assessment scheme was school-based, devoid of external assessment and certification. Notwithstanding, concerns regarding TVET's quality necessitated strategic overhauls, culminating in the outcome-based TVET strategy of 2008, demand-driven

outcome-based TVET system has been introduced and the curriculum based on occupational standards derived from industry requirements; emphasizing occupational competency assessment as the linchpin for ascertaining graduate proficiency (MoE, 2008). Although it is claimed that broad range of stakeholders from private and public sectors were involved in the process (MoE, 2008), some studies found that employers were not volunteer to accept some training schemes, for example, placement of trainees for cooperative training in employing organizations (Solomon, 2016).

The narrative above illustrates that the development of educational policies in Ethiopia, especially concerning vocational education and training, from the 1940s through to 2020, was primarily driven by political motivations rather than by an informed understanding of the nation's socio-economic needs. This emphasis on political ideology over pragmatic socio-economic alignment led to a series of education reforms and policies that did not adequately address or anticipate the evolving needs of Ethiopian society. As a result, this approach has been a significant factor contributing to the persistent instability within the Ethiopian education system. Such instability reflects not only in the inconsistency of educational quality and relevance but also in the recurrent misalignment between educational outputs and the labor market's demands, exacerbating issues like unemployment among graduates. This historical trajectory underscores the critical need for future policy formulations to be more deeply rooted in the socio-economic realities of the country, engaging with a broad spectrum of stakeholders to ensure that the education system is both responsive and resilient to the needs of Ethiopian society.

It is within this policy development context that the Ministry of Science and Higher Education (MoSHE) has unveiled a demand-driven TVET policy and strategy in 2020, because "TVET has fallen short of both governmental and private sector expectations" (MoE, 2018). It is claimed that the 2020 TVET policy and strategy was developed with a comprehensive stakeholder involvement throughout its formulation and execution phases. Indeed, demand-oriented TVET should encapsulate the prerequisites of industry and society alike. A rising global consensus acknowledges the instrumental role of diverse stakeholders in shaping TVET policies to resonate with workforce and societal needs. Engaging these stakeholders is paramount for discerning evolving market trends, identifying emergent skill sets, fostering collaboration to address the ensuing challenges and obtain valuable feedback both on successful efforts and on areas of improvements (World Bank et al., 2023). An inclusive approach, involving a wide spectrum of stakeholders, enriches the TVET system, amplifying its relevance and efficacy.

Though MoSHE claimed that there was a comprehensive stakeholder involvement throughout its formulation and execution phases, the extent to which relevant stakeholders' have been engaged in the 2020 TVET policy and strategy development process need to be systematically studied. The study is important to substantiate the developed policy, maximizing the government's capacity in sound implementation and inform future policy making, what was learned from the past endeavors and ensure transparency, which is the added value of this research. Besides, there is a dearth of research on the status of stakeholder involvement and the role they play in shaping policy and strategies. This study delves into the purported stakeholder engagement and awareness-building in the Ethiopian TVET policy and strategy development, as asserted by MoSHE, guided by the research questions: a) In what manner are stakeholders engaged into the Ethiopian TVET policy and strategy formulation process? And b) Were the efforts made to build awareness, understanding and consensus among stakeholders on TVET policy and strategy effective?

1.1. Collaborative Dimensions of TVET Policy Development: Stakeholders Engagement and Contemporary Practices

TVET colleges have grown nationwide to improve accessibility, with public institutions increasing from 16 to 334 between 2000 and 2015. In this case, the government and the community have a great deal to contribute to building infrastructure like workshops, laboratories, and purchasing training equipment. The private sector TVET institutions focus on ICT, business, and health sectors, resulting in a nearly 1,000-fold increase in access. TVET institutes are present in all regional states and city administrations, offering training at various levels (MoE, 2018). Further, ILO (2022) substantiate Ethiopia's government-affiliated and private business development service providers offer training programs for micro and small firms, but enterprises are hesitant due to trainers' incompetence. Several non-governmental actors are also involved in skill development. UNESCO's Better Education for Africa's RISE project improves agro-processing training standards; UNIDO's Program for Country Partnership enhances skills; and ILO works at a Youth Employment Service Center. The financial support provided by the European Union Emergency Trust Fund for Stability is intended to facilitate vocational training and foster the establishment of micro and small enterprises, and the German International Zone's Sustainable Training and Education Program improves vocational and higher education quality and relevance.

Stakeholder engagement in the formulation of TVET policies has gained increased prominence as a mechanism to foster policy inclusivity, relevance, and efficacy. Drawing on contemporary research and scholarly

works, this framework delves into the intricacies of stakeholder participation in the TVET policy-making process. Stakeholders' engagement is not practice as expected due to various challenges. Many academics, such as McGrath et al. (2019), argue that one major problem in African countries is the mismatch between the formal Technical and Vocational Education and Training (TVET) institutions and the demands of labor markets and economies. This challenge arises primarily from the absence of stakeholder engagement in the development of policies and strategies. Insufficient effective involvement of these stakeholders in policy formation leads to issues in implementing the system and fails to address labor market demands.

Several benefits accrue from stakeholder engagement in TVET policy development. Primarily, incorporating the perspectives and needs of diverse stakeholders, notably industry representatives, ensures policy relevance. The UNESCO and ILO's 2002 recommendations for TVET underscore the significance of collaborative approaches in policy, planning, and administration. While governments remain pivotal, these guidelines recognize that the nuances of a contemporary market economy necessitate innovative policy formulation and execution through strategic alliances between the government, employers, and other key stakeholders (ILO, 2018). Sole reliance on governmental interventions is insufficient in an era characterized by rapid technological advancements and evolving labor market prerequisites. Hence, the UNESCO and ILO recommendations advocate for an approach that emphasizes inclusive partnerships, rallying various entities to actively participate and foster awareness in shaping TVET policies and strategies. Moreover, the successful execution and sustained impact of TVET policies hinge on cultivating awareness, fostering comprehension, and building consensus among stakeholders.

According to UNESCO (2021), TVET stakeholders engage in identification, integration, and implementation. Ministries and statutory organizations shape TVET policy broadly. Advocacy organizations are meso-level, while TVET schools and providers are micro-level. All stakeholders contribute to policy formation, ensuring a responsive and effective TVET system. These the three-I strategies creates a sustainable TVET ecosystem that meets social and economic demands using knowledge and resources.

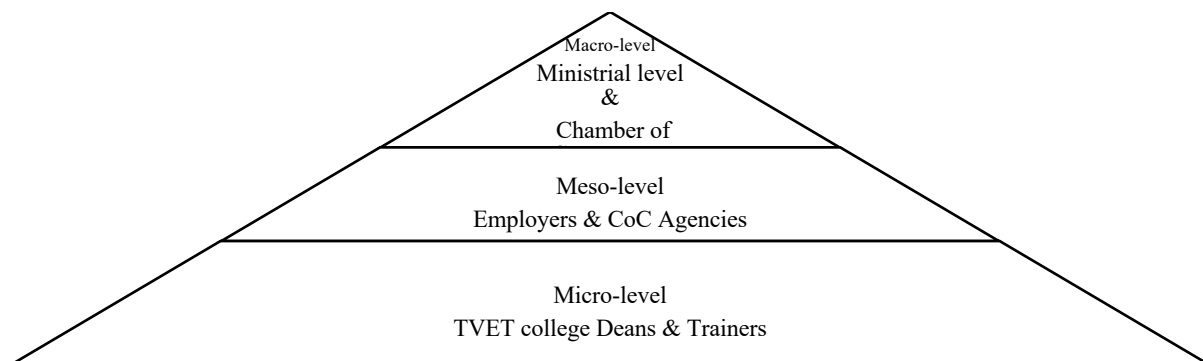


Fig. 1 Key stakeholder at different level adapted from (UNESCO, 2021)

Stakeholder involvement in TVET policy design ensures an efficient and responsive system. This involvement includes macro, meso, and micro stakeholders. Ministerial groups and chambers of commerce shape higher-level TVET policy and activities. Their participation ensures the TVET system meets national goals and economic needs. Regional center of competency agencies and employers participate meso-level. These stakeholders actively advocate for employers and promote stakeholder cooperation due to their expertise. Their engagement bridges the TVET system and industry needs, decreasing the gap. Polytechnic institutions and trainers are essential at the grassroots level. They are conducting TVET programs that teach practical skills. By actively including learners in policymaking, the TVET system can better meet their needs and prepare them for the workforce. The TVET system can efficiently implement industry-aligned policies and programs by integrating and actively involving stakeholders at every level. The TVET system stays relevant, responsive, and ready to address economic demands by working in collaboration. The establishment of partnerships between education and training institutions, industry, and private enterprises is imperative in order to cultivate a labour force that is both pertinent and proficient. Consequently, it is incumbent upon education and training institutions to collaborate with enterprises to ensure that the skills being imparted are directly applicable to the demands of the workplace (Hiim, 2022).

1.2. Public Policy Making Procedures

Public policy encompasses the decisions and actions taken by the government in response to societal challenges. These policies govern social conflicts, define the status of society in relation to other entities, allocate both symbolic and physical advantages to members of society, and ease the collection of revenue, usually through taxation (Dye, 2017). Public policies might therefore guide behaviors, establish administrative structures, allocate benefits, collect taxes, or encompass a combination of these actions; overall, the government has implemented a course of action in order to address public issues (Martin et al., 2021)

A noticeable trend, especially in Southern and Eastern African nations, is the formulation of an explicit National Skills Development Policy (NSDP). For instance, out of nine Southern African nations, five have a dedicated TVET (or skills development) policy, while two others are currently drafting theirs (Aggarwal et al., 2013). The ILO (2021) posits that nations devise TVET policies to engage all stakeholders, fostering a cohesive vision for the skills system they aim to establish. This alignment with national developmental frameworks ensures policy coherence, proposes structured reforms to enhance training outcomes, details institutional frameworks for the skills system, adopts prevailing best practices, and champions political and collective aspirations. The focus of national TVET initiatives is to improve workforce productivity. Comprehensive TVET policies should be designed to accommodate a diverse range of stakeholders, including school-going youngsters with limited work experience, employed individuals seeking on-the-job training, and aspiring entrepreneurs (ILO, 2022). Policymaking theories emerged prominently in the mid-20th century. Policy development is a structured process, initiating with policy formulation (MoBSSE, 2020). Policy formulation may necessitate the adaptation of pre-existing standards.

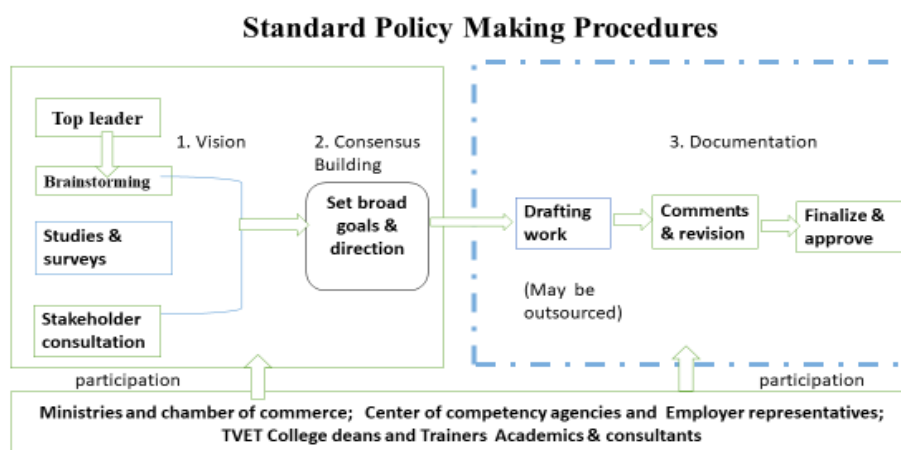


Fig. 2 Policy making procedures adapted from (Ohno, 2011)

According to Ohno (2011), standard policy-making procedure involves several steps, including establishing a clear vision, building consensus, documenting the process, brainstorming, conducting studies and surveys, consulting with stakeholders, setting broad goals, drafting work, incorporating feedback and revisions, and finalizing and approving the policies. The top leader establishes a vision, which serves as a guiding principle throughout the procedure. The process involves collaboration among various actors, including government agencies, businesses, academic institutions, and consultants. The policy-making process is documented to ensure transparency and accountability. A lead ministry or agency carries out the overall management and coordination of the policy-making procedure. While these procedures have been followed by several Asian countries. The Ethiopian system has attempted to adapt these procedures, but the implementation appears incomplete or not comprehensive (MoE, 2018). One of the cardinal facets of TVET policy development is garnering feedback from the labor market to ensure TVET aligns with the market's skilled labor demands. This alignment is vital for public pre-employment training and less so for private institutions, which need market alignment to attract trainees, and even less critical for on-the-job training which inherently corresponds with employment.

Dye (2017) examines many policy process models that can be used in public policymaking, including rational and process models as well as institutional and incremental models. Each individual possesses a distinct scenario for the formulation of policies. The initial process model is valuable for comprehending the diverse actions encompassed in policymaking. These activities encompass problem identification, agenda framing, proposal formulation, policy legitimization, policy implementation, and policy evaluation.

The Institutionalism Model emphasizes the significance of government institutions, which have consistently been a primary area of study in political science. Political activities mostly revolve around specific governmental institutions such as congress, the presidency, courts, bureaucracies, states, municipalities, and others. These institutions have the authoritative power to decide, implement, and enforce public policy. Rationalism refers to a policy that is based on reason and aims to attain the highest possible social benefit. In other words, governments should select policies that provide gains for society that outweigh the associated costs by the greatest margin. Conversely, governments should avoid implementing policies if the costs outweigh the benefits. It is vital to note that this concept of greatest social gain encompasses two significant rules. Firstly, it is imperative that no program is implemented if its costs outweigh its advantages. Furthermore, while considering several policy options, it is crucial for decision-makers to select the policy that yields the highest benefit relative to its cost. Put simply, a policy is considered rational when the positive difference between the values it achieves and the values it sacrifices is larger than that of any other policy choice. The incrementalism approach perceives public policy as a progression of previous government actions, characterized by small and gradual adjustments. Incrementalism is a conservative approach that builds upon existing programs, policies, and expenditures as a foundation. It focuses on developing new programs and policies, as well as making adjustments to present ones through increases, cutbacks, or tweaks (Dye, 2017).

Educational roadmap was established under the auspices of the Ministry of Education. A panel of experts, consisting of representatives from the Minister of Education, Addis Ababa University, Addis Ababa Science and Technology University, the Oromia Education Bureau, the Department for International Development, and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), assessed the execution of the previous educational policy. They identified the positive aspects and shortcomings, and provided recommendations for future policy directions (MoE, 2018). The Ethiopian TVET policy and strategy have been formulated by the Ministry of Science and Higher Education (MoSHE), now known as the Ministry of Labor and Skill (MoLS), with the responsibility of overseeing the Federal TVET Institute. Concentrating on the discoveries of the educational road map, prior implementation reports, and other materials created by the Federal TVET Agency. The Ethiopian TVET strategy was formulated by the Ministry of Science and Higher Education (MoSHE) by following both the institutional and incremental models, as suggested by the ten-year educational roadmap. The old Technical and Vocational Education and Training (TVET) system lacked a formal policy; however, it did possess a competency-based TVET strategy formulated by the Ministry of Education. The implementation of competency-based TVET has been in progress, with specific adjustments made to tackle challenges found in the prior execution of the strategy (MoE, 2018). This study aims to scrutinize stakeholders' involvement and awareness in policy formulation, which encompasses vision articulation by leadership, consensus building, and documentation involving all stakeholder input.

2. Methods and Materials

2.1. Research Approach and Design

The study aimed to examine stakeholders' engagement and awareness generation in the development of TVET policy and strategy in Ethiopia. Silverman (2016) has elucidated the alignment between a qualitative research philosophy and a transformative worldview. Within this paradigm, the process of data collection primarily involves document reviews, unstructured interviews, and focus group discussions. These methods provide comprehensive insights into the experiences and perspectives of the participants.

This research deeply explored individuals' perceptions and experiences regarding the formulation of Ethiopian TVET policies and strategies. According to Creswell & Creswell (2018), a phenomenological design seeks to capture the embodiment of experiences from participants, resulting in a comprehensive description of a central phenomenon. This approach empowers the researchers to gather data from key stakeholders at both the federal and regional echelons, which includes officials, experts, and industry representatives. Through in-depth interviews, focus group discussions, and document analyses, varied perspectives were captured under the umbrella of reviewed contemporary literature and practices. The study was fundamentally driven to unearth novel insights, delineate existing practices, and identify gaps in stakeholder engagement during TVET policy/strategy creation. Given these objectives, the phenomenological qualitative research design (Creswell & Creswell, 2018) was deemed fitting for this investigation.

2.2. Source of Data and Sampling

Data were garnered from both primary and secondary sources. Primary data were sourced from experienced directorates of various Federal Ministries and Five Regional center of competency (CoC) directorates, in addition to industry supervisors, deans of TVET Colleges, and trainers. Secondary data, which provided a deeper understanding of the prevailing scenario, were extracted from TVET policies and strategies, international benchmark documents, books, and scholarly articles.

Purposive sampling was the method of choice, as it aligns with the qualitative research principle of selecting participants or sites that can offer the deepest understanding of the research issue at hand, as noted by Creswell & Creswell (2018). A total of thirty-five interviewees and two sets in focus group discussions were enlisted through this method.

Table 1 Population and sample size

No	Regions	CoC Assessment Directorates	TVET polytechnic Academic Deans more than 5 years' experience	Industry representatives more than 5 years' experience.	Total	Trainers in Focus group discussion
1	Addis Ababa	1	4	4	9	(8)
2	Amhara	1	2	2	5	(8)
3	Oromia	1	2	2	5	-
5	Sidama	1	1	1	3	-
6	Gambella	1	2	1	4	-
	Directorates from 6 line ministries and Labor & Skill ministries	7	-	2 (from chamber of Commerce and sectorial association)	9	
	Total	12	11	12	35	(16)

Source: Statistical data (MoLS, 2023)

2.3. Instruments of Data Collection

Unstructured interviews served as a primary tool for extracting in-depth insights from stakeholders about their involvement in the Ethiopian TVET policy and strategy creation. Among the interview guide questions are the following “Could you please give me a brief overview of your participation in the development of the policy and strategy of TVET? How do you evaluate the effectiveness of awareness created for relevant stakeholders about the current TVET policy and strategy?”

These interviews, encompassing directorates, hotel and industry supervisors, deans of TVET College, and trainers from 33 organizations, were designed to facilitate natural feedback and to allow respondents to elucidate their responses. The interviews were conducted in-person, and audio recordings were made for accuracy. In Parallel, document reviews shed light on stakeholder participation in TVET policy formulation and offered international comparisons. The goal was also to validate and ensure the consistency of the data acquired through interviews.

2.4 Validity and Reliability

In the realm of qualitative research, validity and reliability are paramount for ensuring the integrity and credibility of the study's outcomes, as articulated by Nowell et al. (2017). Validity pertains to the accuracy and authenticity of the results, signifying how well the research reflects the phenomena it intends to represent. Conversely, reliability denotes the consistency and dependability with which the research process and its findings can be replicated.

To bolster validity, the study employed a multifaceted approach, incorporating interviews with a broad spectrum of participants, including federal ministry-level officials, representatives from the Chamber of Commerce and sectorial associations, regional industry leaders, Polytechnic deans, and trainers. This technique of triangulating information, alongside prolonged engagement with the data, serves to enrich the depth and breadth of the findings.

In pursuit of maintaining high standards of reliability, the researchers implemented several strategies. These included the establishment of inter-coder reliability to ensure consistent data coding across researchers, peer debriefing to facilitate a reflective review process, decision-making audits to track and justify methodological choices, and thematic analysis for rigorous data interpretation. These methodologies collectively contribute to the research's robustness, ensuring that its conclusions are both reliable and valid.

2.5. Data Analysis and Interpretation

Data were collected from TVET Deans and Trainers who are directly involved in the implementation of the policy, Federal Ministries, Chamber of Commerce, and industry representatives who are relevant stakeholders who are directly involved in the TVET process. Narrative analysis was employed for data procured through interviews and document reviews. Comprehensive field notes were maintained during the interviews. The transcription of interviews and focus group discussions turned audio recordings into written text, which was subsequently coded to pinpoint key themes, patterns, or concepts. After thorough readings, meaningful text segments were coded, and from these themes emerged; stakeholders' engagement and awareness creation based on similarities of responses. These themes pertinent to the study's objectives informed the structure of the results section.

2.6. Ethical Considerations

Upholding research ethics, respondents were initially informed about the study's objectives and procedures, both verbally and in writing. Confidentiality was strictly maintained; respondents were never asked to reveal their identities, ensuring anonymity. Consent forms, detailing the study's objectives, potential benefits, and risks, were provided. Meticulous efforts were made to document and objectively present the collected data. Any borrowed ideas were rightfully credited, adhering to the appropriate citation standards.

3. Results and Discussion

The study's results are articulated under two primary themes, which encompass the intricacies of stakeholder engagement in the Ethiopian TVET policy and strategy development process, as well as the initiatives taken to foster understanding and consensus among these stakeholders. Herein, we delve into the findings associated with each of these themes.

3.1. Stakeholders Engagement in the Current Ethiopian TVET Policy and Strategy Development Process

The Ethiopian TVET policy and strategy development process manifested varying levels of stakeholder engagement. The spectrum of involvement ranged from active participation in decision-making to merely being informed about policy changes after their formulation.

Based on a comprehensive review of the vision presented by senior leadership in policy, strategy, and development guidelines, several essential steps emerge in the formulation process. Initially, there is the establishment of a unified vision from the top echelons of leadership. Following this, there's a consensus-building phase, wherein broad goals and directions are set. This phase encompasses brainstorming sessions amongst pertinent ministries and agencies, an in-depth collection and analysis of international best practices, and dialogues with non-governmental stakeholders.

The final phase involves documentation. Drafts for these documents originate from varied backgrounds, including government officials, academics, and consultants. Throughout this stage, there is a strong emphasis on engaging all stakeholders in the drafting and commentary process.

According to UNESCO (2021), stakeholder engagement is at three levels: macro, meso, and micro. In this study, the macro level consists of the Ministries of Health, Urban Development and Construction, Culture and Sport, and Tourism, as well as the Chamber of Commerce. Which focuses on contributing ideas related to their middle level human resource demand to shape the policy and strategy of TVET. Meso level consists of employers and regional CoC agencies engaged to bridge the TVET system with their needs. The micro level includes TVET college deans and trainers, the pioneer implementers of the policy; they share experience from previous policy implantation and generate better ideas to include in the current development of the policy. When the ideas of these stakeholders are well integrated, there will be effective policy implementation.

Feedback from the MI and MH sheds light on the collaborative nature of this procedure. For instance, DMI confirmed their active participation in both the drafting and commentary phases of the policy and strategy formulation:

We have meticulously developed a comprehensive ten-year strategy to address the needs of middle-level human resources. Significant contributions have been made in devising pedagogical strategies for TVET students across different levels. Additionally, we have prioritized the integration of ICT to enhance educational support, the introduction of entrepreneurial courses into the curriculum, the value of short-term training, and the advancement of a sustainable green economy.

On a related note, DMH confirmed their involvement in reviewing the previous TVET policy and strategy. They also contributed to the formulation of the new TVET policy and strategy. In reference to this, the DMH stated:

We previously highlighted concerns with the former approach, particularly in terms of level-based assessments, health certification, and training delivery systems. This underscores the importance of our decision to revise the policy and even suggest that graduates undergo a nationwide competency examination before entering the workforce.

The DMH mentioned, "Although they contributed their knowledge to the drafting of the policy, the sector has not yet taken on the leadership role". On the other hand, the DMCS pointed out that their involvement in the TVET policy and strategy development was not comprehensive, as not all pertinent sections participated.

For example, experts in culture offered their insights on incorporating indigenous knowledge into the policy direction. This expertise has been recognized and incorporated into both the policy and curriculum. However, stakeholders like the Art Wing have no significant affiliation and did not participate in the development of the TVET policy and strategy.

Interviewed DMT and DUDC, highlighted that the Ministries were not involved in the drafting and review of the policy and strategy. This is surprising, given the Ministries significant contribution to the nation's GDP and employment generation. The DMT further remarked:

The tourism industry is pivotal in generating employment opportunities and mitigating unemployment rates. It substantially boosts the nation's gross domestic product (GDP). However, it is noteworthy that hiring practices within this sector tend to favor nepotism over the competency of graduates. Regrettably, even with the ministry's urging, issues pertaining to human capital development remain overlooked in the current policy. Additionally, there is a noticeable integrity deficit in institutions operating at the ministerial level.

The interviewed DUDC also remarked:

The development of the TVET policy and strategy did not involve a consensus-building approach, drawing upon broad objectives and directions from various brainstorming sessions. Although the construction sector possesses a legal framework to establish standards for middle- and lower-level occupations and oversee industry training, they have not participated in the recent TVET policy and strategy formulation.

In contrast to the previous statements about participation, a DMLS offered a different perspective. She stated,

The policy was crafted by the Ministry of Science and Higher Education to address the gaps identified in the educational roadmap. This roadmap underwent thorough discussions down to the grassroots level of the educational system. Stakeholders from all tiers were actively involved, and awareness was disseminated correspondingly at every level. In the end, the policy received approval from the Minister of Science and Higher Education.

As can be inferred from the above references, it is noteworthy that while the developer of the policy MLS claims comprehensive stakeholder involvement, only the MI took proactive measures. Specifically, the MI conducted a forecast survey on labor force needs for the upcoming decade. Other ministries, unfortunately, did not engage in such forward-thinking activities, thus neglecting their roles in the formulation of TVET strategies and policies. Further, the statement highlights that while ministries possess a significant vested interest in cultivating medium and lower-level human resources within the labor market, their participation in policy and strategy formulation is overlooked, and the process itself may exhibit deficiencies in terms of integrity. This implies a requirement for greater acknowledgment of their position and proficiency, along with enhancements in the openness and responsibility of policy-making procedures within the ministries.

Line ministries play a pivotal role as key stakeholders in TVET. Operating within their respective legal frameworks, they lead and coordinate their sectors down to the grassroots level. Crucially, they understand their specific human capital needs. As per the data sourced, the MCS, MH, and MI were actively involved in shaping TVET policy and strategies. The MLS further corroborated their contributions. Conversely, the MUDC and MT indicated a lack of engagement in this policy and strategy development. They also displayed limited awareness of the same.

Feedback from regional center of competency (CoC) directorates indicated disparities in stakeholders' engagement. Interviewed representatives from the Amhara and Sidama regional states confirmed their active participation in the formulation of TVET policies and strategies. For example, an official from the Amhara CoC Directorate provided further insights, mentioning, "In Amhara, stakeholders contributed during the drafting of

the education and training roadmap, especially on TVET topic, offering valuable comments. Regrettably, these insights weren't integrated to the extent anticipated."

In contrast, the CoC directorates from Addis Ababa City Government, Oromia, and Gambella regions indicated that they were side lined during these discussions. An interviewee from the OCoCD elaborated on this sentiment, highlighting their exclusion from the policy and strategy formation processes as follows:

During the formulation of the current TVET policy and strategy, experienced professionals were not actively involved in the drafting and review process. However, senior officials did contribute. The involvement of industries was notably limited, especially at the regional level.

Stakeholder engagement in the policy and strategy formulation process is not merely a good-to-have element but an essential one, as emphasized by the World Bank and other reputable authorities (World Bank et al., 2023). This principle emerges from the understanding that robust stakeholder participation is pivotal in addressing potential challenges that might have obstructed previous implementation efforts and fostering the enhancement of current policy and strategic frameworks. Further, the Technical and Vocational Education and Training (TVET) policy underscores the establishment of autonomous national and regional TVET Centers of Competence (CoC) certification entities (MoSHE, 2020). Serving as the primary agents of TVET policy and strategy execution, these bodies hold significant influence.

Incorporating the insights and expertise of a diverse array of stakeholders—including government entities, academic institutions, industry professionals, and civil society representatives—enriches the policy and strategy formulation process. This comprehensive approach augments the chances of drafting a well-rounded and actionable blueprint to propel TVET initiatives forward. Thus, the active involvement of stakeholders is not merely desirable but imperative to overcome historical implementation hurdles and pave the way for robust TVET systems. However, there is a noticeable gap in stakeholder participation at the CoC directorate level. A limited number of CoC Agency officials have been engaged, indicating a lack of holistic involvement.

On the topic of participation, insights were also gleaned from interviews with regional TVET polytechnic deans and trainers. Those from Addis Ababa City Administration, Oromia, and Gambella regional states remarked that they were not involved in shaping the TVET policy and strategy. Conversely, interviewed TVET deans from the Amhara and Sidama regional states expressed that they played an active role by offering feedback and revisions to the draft. An interviewed AmTVETDe elaborated on their participations by noting:

Actively provided feedback on the draft policy. During its formulation, undertook survey research to guide policy and strategy development. Among the many issues addressed in the policy, two significant changes stood out: the shift from level-based to holistic assessment, where students are evaluated as they transition from their academic program to the workforce, and the transformation of the grading system from a mere "competent" designation to a scaled grading approach. Nevertheless, the policy overlooks crucial matters, such as incentives for industries participating in cooperative training and competency assessment.

The focus group discussion with the trainers highlighted that, despite being key implementers, they were not involved in the initial drafting and feedback stages of the policy-making process, making it less interactive. For example, AT shared the following insights:

Trainers have been invited to attend seminars hosted by the Minister of Labor and Skill to increase awareness of existing policies. However, the policy appears to have been directly adopted from other countries without tailoring it to the unique context of Ethiopia. It was formulated using a top-down, non-participatory approach.

Data from regional industry representatives indicates that industry participation at the regional level was limited. Representatives interviewed from the Addis Ababa, Amhara, Oromia, Gambella, and Sidama regions noted an absence of meaningful engagement in TVET policy and strategy formation, although minor regional variations were observed. The following is an extract from interview with a participant from AIR of others' view as well:

There is a clear discrepancy between the training system focused on building competencies for trainees and the actual demands of the market. This results in a mismatch between the skills of graduates and what the industry requires. Many colleges are ill-equipped to address these industry needs. Moreover, industries have not been sufficiently involved in shaping TVET policy and strategy to bridge these gaps.

The development of TVET (Technical and Vocational Education and Training) policy and strategy, when disconnected from employer engagement, may not adequately align with the needs of companies. As a result, many companies might perceive TVET as having limited relevance (Kis and Park, 2012). Even though industries are pivotal stakeholders in TVET, data gathered from the regional states such as; Addis Ababa, Oromia, Amhara, Sidama, and Gambella suggests a lack of substantive involvement of these industries in TVET policy and strategy formulation.

Interview conducted from the ECCR and SAR revealed that, while both the chamber and sectoral associations play significant roles in skill development, they were not deeply involved in the TVET policy and strategy development process. They further noted:

The Ethiopian Chamber of Commerce actively collaborates with the sector to advocate for its needs. It scrutinizes trade and investment regulations, focusing on the benefits to its members and their societal contributions. The chamber also partners with TVET graduates to address industry requirements. However, stakeholder involvement in the TVET approach has been lacking since 2008. While the chamber was not directly involved in designing the current policies, it did provide feedback on the educational blueprint. The prevailing strategy has led to ineffective governing boards and remains ambiguous about the private sector's role. The industry's lack of expertise in occupational standards and competency evaluations stems from a limited awareness of the TVET policy and strategy. No tangible incentives exist, and the environment is not conducive to industry participation. Consequently, the Chamber of Commerce's engagement in the TVET policy and strategy formulation has been limited.

According to UNESCO (2020) it is advantageous to involve the private sector in the development of targeted objectives and policies for Technical and Vocational Education and Training (TVET) through public-private partnerships (PPP). This is in alignment with the overarching goals of ensuring relevance and quality. While government representatives are adept at managing the formal aspects of designing training objectives, policies, and governance, the inclusion of private sector representatives introduces a unique perspective. This can lead to innovative ideas and effective methodologies for regular operations. Given these potential benefits, there is a strong emphasis on incorporating industries in decision-making processes, in the formulation of TVET policies, and in their subsequent implementation.

Furthermore, Pinnow (2019) highlighted that stakeholders such as Trade Unions, associations express significant interest in vocational training issues. They also influence vocational training policy as it is in their favor. However, there seems to be a gap in engagement. Data suggests that the Ministry of Labor and Skills has focused on raising awareness about the developed policy document rather than actively involving entities like the Ethiopian Chamber of Commerce and Sectorial Association from the very beginning in the policy development process. This oversight could pose significant challenges to the relevance of the TVET system and the effectiveness of policy implementation.

3.2. Awareness and Consensus Building among Stakeholders in the Development of TVET Policy and Strategy in Ethiopia

Stakeholder awareness is crucial in the development and implementation of policies and strategies, especially in areas such as Technical and Vocational Education and Training (TVET). In Ethiopia, efforts to foster understanding and consensus among stakeholders have produced varied outcomes, as illustrated by feedback from various ministries.

Feedback from Key Ministries: Officials from the Ministries of Industry, Health, and Culture and Sport confirmed their awareness of the recently introduced TVET policy and strategy. These officials emphasized their active participation in the process, noting, "We attended workshops aimed at creating awareness, and a consensus was achieved during the drafting and review of the policy and strategy."

Conversely, officials from the Ministry of Urban Development and Construction, and Ministry of Tourism expressed a lack of awareness about the new TVET policy and strategy. They attributed this gap to challenges in stakeholder integration and collaboration, stating, "Due to integration and linkage issues, we lack a clear comprehension of the policy and strategy."

Regional Insights: Feedback from the CoCD in Addis Ababa, Oromia, Amhara, and Sidama Regional States suggests a need for more inclusive awareness initiatives. These respondents voiced concerns over their limited understanding of the TVET policy and strategy.

The varied responses from these ministries and regional entities underline the importance of comprehensive stakeholder engagement in policy and strategy development. Effective awareness campaigns and improved inter-ministerial coordination can ensure that all relevant parties are aligned and informed, thereby driving the successful implementation of the TVET policy and strategy in Ethiopia.

Data from the CoCD of Addis Ababa, Oromia, Amhara, and Sidama Regional States reveals that there is a lack of adequate awareness regarding the TVET policy and strategy. While agencies and clusters within these regions have undergone five days of training on the current TVET policy and strategy, this duration is insufficient for a comprehensive understanding of the policy's fundamental issues.

On the topic of awareness, the CoCD in the Gambella regional state has further emphasized their stance, stating, they have not participated in awareness-creation workshops and lack a clear understanding of the TVET policy and strategy.

Responses from the TVETD in Addis Ababa, Oromia, Amhara, Sidama, and Gambella indicate that they have taken part in awareness-creation workshops and are well-informed about the TVET policy and strategy. However, the trainers' focus group discussion reveals a contrasting perspective, as they expressed a lack of clear understanding of the TVET policy and strategy.

Interview data from all sampled areas, with the exception of the SIR, highlight a deficiency in awareness regarding the current TVET policy and strategy. This was further corroborated by AIR during their interviews.

For instance, during cooperative training and competency assessments, private industries placed a higher emphasis on ensuring trainees and protecting expensive machinery than on nurturing the future workforce. Even though the new policy and strategy documents were crucial, their distribution was inadequate. Moreover, the efforts to raise awareness regarding the produced policy and strategy were not thorough.

Like many African nations, Ethiopia grapples with a negative public perception of Technical and Vocational Education and Training (TVET). Often, TVET is associated with low-status occupations, inadequate wages, and limited opportunities for personal growth. This perception stems in part from a quality deficit, which hinders TVET graduates from effectively competing in the labor market. Consequently, TVET is viewed as a fallback for students who do not qualify for higher education (MoE, 2008). To address this perception, both current and past Ethiopian TVET strategies (MoE, 2008; MoSHE, 2020) have prioritized raising awareness. However, based on the observations above, it's evident that the Ministry of Labor and Skills hasn't effectively communicated the current TVET policy and strategy to key stakeholders, including pioneer implementers, trainers, and industry representatives in Ethiopia. This suggests certain limitations in the policy formulation process. To bridge these gaps, it is imperative for the relevant authorities to ramp up awareness campaigns targeting pertinent stakeholders. Additionally, efforts should be made to build consensus and to integrate feedback from stakeholders into forthcoming regulations and guidelines. Such feedback could include industry incentives for those offering their premises for cooperative training and competency assessments.

4. Conclusions and Implications

The effectiveness of Technical and Vocational Education and Training (TVET) hinges on the synergistic collaboration among a diverse array of stakeholders. Enhanced stakeholder involvement not only strengthens the TVET policy framework but also ensures its efficient execution. However, an in-depth analysis of the TVET policy environment in Ethiopia reveals a complex scenario. Ministerial engagement stands at about fifty percent, with a notable exception being the Ministry of Industry, which lacks a comprehensive analysis of workforce demand for mid-level personnel. The process of developing the center of competency (CoC) policy saw significant participation from the Sidama and Amhara regional CoC agencies, conspicuously omitting regions such as Addis Ababa, Oromia, and Gambella. Furthermore, the perspectives of polytechnic college Deans and trainers, who are crucial to the TVET ecosystem, appear to be under represented. A significant engagement deficit is evident among industries, despite their vital importance to TVET. In totality, only 17 percent of stakeholders were actively involved in the formulation of Ethiopian TVET policies and strategies. Additionally, numerous ministerial stakeholders and essential TVET policy agents, including trainers and industrial sectors, are reportedly uninformed about the prevailing policy directions. This segmented approach to stakeholder engagement poses considerable challenges to policy implementation.

Based on these observations, the study provides the following recommendations. The ministries in sectors like Health, Tourism, Culture and Sport, Urban Development, and Construction should align their mid-level human capital strategies with the TVET vision. Regional CoC Agencies play a crucial role in maintaining TVET quality, but their absence from policy-making is evident. The Ministry of Labor and Skill should capitalize on their expertise to shape the future of TVET. A structured forum led by the Ministry of Labor and Skills should be established to offer clear policy guidelines and solicit valuable insights. TVET trainers are essential for achieving policy objectives, and a partnership between the government and trainers' unions is crucial for inclusivity. Regional industries are often overlooked, and the Ministry of Labor and Skill should develop innovative strategies to bridge this gap. The Ethiopian Chamber of Commerce and Sectoral Association, representing the private sector, should be included in TVET policy discussions. Employers and associations seeking participation in TVET should be encouraged through incentives like tax breaks. A comprehensive awareness program, proposed by the Minister of Labor and Skills, is essential for understanding and cooperation among key TVET stakeholders.

In conclusion, adopting a holistic and inclusive strategy is fundamental to the effective implementation and continuous improvement of the Ethiopian TVET policy and strategy.

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Conflict of Interest

The authors declare that they have no conflicting interests in doing this research.

Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design:** Ashebir Tekle, Solomon Areaya; **data collection:** Ashebir Tekle; **analysis and interpretation of results:** Ashebir Tekle, Solomon Areaya, and Getachew Habtamu **draft manuscript preparation:** Ashebir Tekle, Solomon Areaya, and Getachew Habtamu. All authors reviewed the results and approved the final version of the manuscript.

Appendix A

Interview Code Classification

Interviewed Ministerial Organizations	Code
Ministry of Health	MH
Ministry of Industry	MI
Ministry of Urban development and Construction	MUDC
Ministry of Culture and Sport	MCS
Ministry of Tourism	MT
Ministry of Labor and Skill	MLS
Interviewed Directorates	Code
Directorates from Ministry of Health	DMH
Directorates Ministry of Industry	DMI
Directorates Ministry of Urban development and Construction	DUDC
Directorates Ministry of Culture and Sport	DMCS
Directorates Ministry of Tourism	DMT
Directorates Ministry of Labor and Skill	DMLS
Interviewed CoC Directorates	Code
Addis Ababa CoC Directorates	ACoC D
Amhara CoC Directorates	AmCoCD
Gambella CoC Directorates	GCoCD
Oromia CoC Directorates	OCoCD
Sidama CoC Directorates	SCoCD
CoC Directorates	CoCD
Interviewed TVET Deans	Code
Addis Ababa TVET Dean	ATVETDe
Amhara TVET Dean	AmTVETDe
Gambella TVET Dean	GTVETDe
Oromia TVET Dean	OTVETDe
Sidama TVET Dean	STVETDe
Technical Vocational Education and Training Dean	TVETD
Focus Group discussion of Trainers	Code
Addis Ababa Trainers	AT
Amhara Trainers	AmT
Interviewed Regional State Industry representatives	Code
Addis Ababa industry representative	AIR
Amhara industry representative	AmIR
Gambella industry representative	GIR
Oromia industry representative	OIR
Sidama industry representative	SIR
Interviewed Chamber of Commerce and Sectorial Association representatives	Code

Ethiopian Chamber of Commerce representative
Sectorial Association representative

ECCR
SAR

Appendix B

Interview Protocol for Federal Ministry Level Directorates, Chamber of commerce representatives, Industry Supervisors, CoC Agency assessment Directorates, and TVET polytechnic college deans

The purpose of this Interview is to collect data to investigate into the depth of stakeholders' engagement in the formulation of TVET policies and strategies, and assesses the efficacy of awareness-building initiatives in Ethiopia. The success of this study depends on your responsible, sincere and timely response.

1. Would you please tell me about your participation in the development of the policy and strategy of TVET if you had any? What was your role during the policy formulation and strategy development?
2. Can we discuss about the overall involvement and participation of stakeholder during the process of the policy and strategy of TVET?
3. How do you judge the effectiveness of awareness created for you about the current TVET policy and strategy?

Thank you so much!

Appendix C

Interview Protocol for formerly Ministry of Science and Higher Education, current name Labor and skill Ministry Directorate

The purpose of this Interview is to collect data to investigate into the depth of stakeholders' engagement in the formulation of TVET policies and strategies, and assesses the efficacy of awareness-building initiatives in Ethiopia. The success of this study depends on your responsible, sincere and timely response.

1. Would you please tell me about the participation of relevant stakeholders in the development of the policy and strategy of TVET? What was their roles during the policy formulation and strategy development?
2. Can we discuss about the overall involvement and participation of stakeholder during the process of the policy and strategy of TVET?
3. How do you judge the effectiveness of awareness created for relevant stakeholders about the current TVET policy and strategy?

Thank you so much!

Appendix D

Focus group discussion Guide for TVET polytechnic college trainers

The purpose of this Interview is to collect data to investigate into the depth of stakeholders' engagement in the formulation of TVET policies and strategies, and assesses the efficacy of awareness-building initiatives in Ethiopia. The success of this study depends on your responsible, sincere and timely response.

1. Would you please tell me about your participation in the development of the policy and strategy of TVET if you had any? What was your role during the policy formulation and strategy development?
2. Can we discuss about the overall involvement and participation of stakeholder during the process of the policy and strategy of TVET?
3. How do you judge the effectiveness of awareness created for you about the current TVET policy and strategy?

Thank you so much!

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