
**JIMMA UNIVERSITY**

**JIMMA INSTITUTE OF TECHNOLOGY**

**SCHOOL OF GRADUATE STUDIES**

**FACULTY OF CIVIL AND ENVIRONMENTAL ENGINEERING**

**CONSTRUCTION ENGINEERING AND MANAGEMENT CHAIR**

# ASSESSMENT OF BIDDERS QUALIFICATION CRITERIA IN TENDER EVALUATION PROCESS, A CASE OF JIMMA CITY PUBLIC BUILDING PROJECTS

By

Terefe Zerfu Degife

A thesis submitted to the School of Graduate Studies of Jimma University in Partial Fulfillment of the Requirements for the Degree of Master of Science in Civil Engineering (Construction Engineering and Management)

**April 2021 G.C.**

**Jimma, Ethiopia**

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**Advisor: Dr. Getachew Kebede (PhD) _____**

**Co - Advisor: Engr. Mebratu Abera (MSc) _____**

**Juley 2021 G.C.**

**Jimma, Ethiopia**

# DECLARATION

**This Research is my original work and has not been presented for a Degree of Masters in any other University**

Terefe Zerfu Degife _____ _____/ _____/_____

Name Signature Date

This research has been submitted to examination with any approval as university supervisor.

Advisor: Dr. Getachew Kebede (PhD) _____ _____/_____/_____

Name Signature Date

Co - Advisor: Engr. Mebratu Abera (MSc) _____ _____/_____/_____

Name Signature Date

# ACKNOWLEDGEMENT

At this event, I am supposed to praise the almighty God, and his mother St. Kidanemiheret for his will and the courage he gave me to complete this study. Then I would like to express my gratitude and deep appreciation to my advisors, Dr. Getachew Kebede (PhD) and Co - Advisor: Engr. Mebratu Abera (MSc) giving me for their valuable comments, suggestions and advice during preparing this research. Next, I want to acknowledge the Jimma Institute of Technology, for the giving of weekend class opportunity. I am also highly thanks to my friends of classmate, student for giving necessary information.

Finally, my special thanks to all of them, those who with me during this time (my parents, brother's sisters and my friends) who are always been there in times of difficulties and giving me a moral support to complete this thesis work. in addition to that, especially Eng. Toyibas contribution is much more, her care and advice helped me too much.

## ABSTRACT

*In building project, tendering process is one of the critical and important stages. To award building project for bidders must fulfill set of qualification criteria set by the client. Thus, qualification criteria are an important aspect in the tender evaluation process.*

*The objective of this thesis is to identify problems of the qualification criteria, adopted for public building construction working in Jimma city, and to find out negative implication for the development of the sector & the study focuses on how to improve gap of bidder's qualification in public construction project,*

*Questionnaires have been developed and distributed to professionals who are actively working for on the public building construction sector. In addition to see the trend in setting bid qualification criteria, project case studies have been studied on different public building construction projects in Jimma city.*

*Bidder's qualification criteria identified through questionnaires and interview, and then the response have been analyzed to rank the factors based on their relative weight using relative important index analyses as perceived by professionals responding the questionnaires. The study showed that Bidders must submit Our company is always awarded of Lowest bidders, selecting lowest bidder by avoiding technical score, it is always dependent on tender sum are some of the most influential financial qualification criteria process factors considered crucially by the respondents for bid evaluation practice in Jimma city.*

*The thesis was trying to show the way how the bidders" qualification criteria must be managed to create fair and competitive for bidders. Tendering bid evaluation is very important & vital stage in the construction delivery system; especially in an Ethiopian where construction industry developing.*

*This study provides supporting practical solution for public construction client to enhance and improve their bidder's selection processes in order to have successful completion of construction projects that would meet their requirements and increase their satisfaction.*


**Keywords:** *Bidders' Qualification Criteria, Client, Contractor, Consultant, Tender evaluation, Public building,*

# ACRONYMS

| | |
|---|---|
| BET | Bid Evaluation Team |
| ETB | Ethiopian Birr |
| EU | Europe Union |
| FIDIC | Federation International Designers Councils |
| G.C. | Gregorian calendar |
| GDP | Gross Domestic Product |
| ICB | International Competitive Biddings |
| IDA | International Development Association |
| MDB | Multilateral Development Bank |
| MEAT | Most Economically Advantageous Tender |
| MOFEDPM | Ministry of Finance & Economic Development Procurement Manual |
| NCB | National Competitive Biddings |
| PPAPA | Public Property Administration and Procurement Agency |
| PPAPM | Public Property Administration and Procurement Manual |
| SBD | Standard bidding documents |
| UNEP | United Nations Environment Program |
| WBPGL | World Bank Procurement Guide Line |
| WBPM | World Bank Procurement Manual |

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Back Ground

Tender evaluation process is an important part of the construction industry and shares a substantial and important stage of the overall construction project works. In the world many countries construction industry has, however, attracted complains for inefficiencies in outcomes such as cost over runs, time, low productivity, poor quality and inadequacy of the work.

In developing country of Africa like Ghana, the assessment of the bid evaluation process was promulgated alongside guidelines, manuals and regulations to improve the bidding and evaluation methods. The region shares boundaries with four of the ten political regions, Western region in the South west, Eastern region in the east, Brong-Ahafo in the north, Central region in the south and. The Ashanti Region contains the thirty districts; this made up of one Metropolitan, seven Municipal and twenty-two Districts under Ministry of Local government and Rural Development of Ghana [25].

According to the prevalent traditional, Design-Bid-Build mode of contract, the main players of the building construction sector of our country comprises of the consultants, client, contractors and bankers/financiers.

The major financier in of public building construction projects are the Government of Ethiopia i.e. Government Treasury and building Fund, The World Bank, African Development Bank, the Arab Fund, Kuwait Fund and other Multilateral and Bilateral Donors. The Government of Ethiopia takes the lion's share in contribution for most of the public building under construction. On projects funded by the Government of Ethiopia and Recommend on how improving the efforts made to make the bid evaluation process well suited with regard to the identified problems Customer satisfaction [25]. In the cases of my thesis work is the public sector. As case of Jimma city public building construction accordingly, the ministry of urban development and housing building construction on behalf of the Federal Government acts as a client with the mandate of regulating the public Building

construction project Consultants give service like, supervising technical assistances, or designing. Bidder's works related to the building construction, reconstruction, upgrading, demolition, repair or renovation of a building.

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## 1.2 Statement of The problem

Most public building construction projects are administered by the government which faces delay on completion period, cost overrun and quality problem. The major factors influencing in public building construction projects in case of Jimma city are cost overruns and delay which occurs frequently and severely [28]. Without a proper method for selecting the most appropriate bidders, through in public building construction qualification criteria, the performance of the project will be affected [3][7]. There by denying the client value for money. In order to ensure successful completion of public building construction project and to avert projected implementation, failure due to the bidder's inability to undertake or complete the work, the client must select the most appropriate bidders. This involves a procurement system that comprises five common process elements; project packaging, invitation, pre-qualification, short -listing and bid evaluation [2]. Although bidder's qualification criteria need to be tailored to enhance the fulfillment of different project objectives a client like public building construction project tends to assess bidder's qualification criteria they have a habit of using, regardless of any differences between the projects and the problems observed like project delay, reduce quality of work, cost overrun etc. In order to enhance change, an increased understanding of how bidder Qualification criteria affect different aspects of project performance and devise improvement on the process is vital. Therefore, in order to full fill the gap of poor bid evaluation criteria in Jimma city assessing effectiveness of the bidder's selection criteria, is very vital and the project will evaluate and measure of public building Construction projects' tender qualification criteria in case of Jimma, effectiveness is using standard criteria like PPA as a guideline [5]. However, there is incomplete knowledge in the area of bidder's selection criteria. The main contribution that this study will bring to the literature is in understanding how these bidders' qualification criteria affect building contractor selection by the developer in Jimma city public building construction project.

## 1.3 The Research Questions

**The Research Will Answer The Following Questions**

1. How the current tender evaluation practice is performed in Jimma city public building construction project?
2. How much qualification criteria are effective to ensure the required performance of the bidders?
3. How the appropriate prequalification criteria are recommended for better and effective tender evaluation process in Jimma city public construction project?

## 1.4 Objectives

**General Objectives**

- ✓ The general objective of this study work is to make an assessment on bidder's qualification criteria in Jimma public building construction project.

**Specific Objectives**

- ✓ To assess' current criteria being applied for evaluation & selection of bidder qualification Jimma public building construction project.
- ✓ To determine the effect of qualification criteria on bidder's selection in Jimma public building construction project.
- ✓ To determine appropriate evaluation criteria for Jimma city public building project.

## 1.5 Limitations of The Project

Due to constraints recent global burning issue of corona virus (COVID 19) and national political case, was obstacle for physical communicating with advisers, distribution and collection of questioner paper and interviewing the sampled population and lack of internet connection related to political cases, make it the research work time taken, tedious and complicated.

## 1.6 Scope and Organization of The Thesis

**Scope**: - The scope of the thesis is on the assessment of bidder's qualification criteria in tender evaluation process in case Jimma public building construction project. It also forward recommendations and suggestions that can help to improve the bidding and tendering practices. The results of the literature compiled data from interview & questionnaire surveys are presented in this report. Legal basis and government regulations pertaining to the issue of

public construction contract-award procedures are covered in this study. However, the research is limited to, public construction projects, client in Jimma public building construction project. Consultant in Jimma city excludes private clients.

## 1.7 Significance of The Study

The importance of this study is to provide base line information to the construction clients consultants and contractor in the Jimma public building Construction Project, on the importance of bidder's prequalification criteria to be adopted, which will eventually on spot construction sector translate in to a better decision making and increase project performance, in addition to that the research findings may help parties involved in construction to improve their tender evaluation process through better and updated prequalification criteria. After this thesis completed, contribute to better bidder's prequalification criteria to public building construction project or upgrade the quality of the evaluation process.

# CHAPTER TWO

## 2. LITERATURE REVIEW

### 2.1 INTRODUCTION

#### 2.1.1 Construction Project

Construction activities and industry are one of the key foundations for economic development and national growth [15]. The industry has evolved over the time to become more vital, matured and complicated in the recent years. According to, its influence towards economic expansion and long-term national development is undeniable, particularly in developing countries [16]. In fact, a country's industrial growth is an informal indicator of its economic growth. Therefore, managing projects in the construction industry is a challenging and daunting task for many due to cost, time and quality constraints. Large engineering construction projects are made up of various resources, which include labor, materials, and equipment; they involve planning and strategizing to ensure effective operations and the resulting economic advantage [17]. Most projects are of unique due to the involvement of various parties with conflicting interests, resulting in the issues of over-budgeting, time extensions and conflicts among parties if not managed properly. Furthermore, construction project management is increasingly complex, necessitating the implementation of proper project management knowledge practices in organizations. This will be discussed further in the following section.

### 2.7 Overview of Tender Evaluation

#### 2.7.1 Composition of Tender Evaluation Committee

According to [32] a contracts committee shall consist of five members nominated by the accounting officer from among the public officers of the procuring and disposing entity and approved by the Secretary to the Treasury. It also states that there shall be an evaluation committee for each tender consisting of technical officers and persons recommended by the procurement and disposal unit and approved by the contracts committee. Also in South Africa, the accounting officer should appoint a bid evaluation committee for the evaluation of bids received for goods / works or services. Where there is a lack of capacity (human

resources) to establish the committee structure in a specific municipality / municipal entity, it may be agreed upon to share / utilize the committee structure of another municipality/ municipal entity if and when required. The accounting officer, who initiated the requirement, will be accountable for the decisions taken [33]

In Zambia, the Controlling Officer or chief executive officer shall appoint an evaluation committee for each procurement requirement. The function of an evaluation committee shall be to evaluate bids in accordance with the Act. These Regulations and solicitation document; and prepare an evaluation report for submission to the approvals Authority [34]. However, In Ghana [35] states that a Tender Evaluation Panel shall be an ad hoc body of not more than five members constituted for a specific procurement package [36].

According to the Procurement Regulation of Zambia, the Procurement Procedures Manual of Nigeria [35] of Ghana, the members of an evaluation committee shall have the skills, knowledge and experience relevant to the procurement requirement, which may include the technical skills relevant to the procurement requirement, end user representation, procurement and contracting skills, financial management or analysis skills; and legal expertise.

The Public Procurement [35] goes further to state that, the members appointed to the Panel may be staff of the Procurement Unit but no member of the Entity Tender Committee shall act as a member of the Tender Evaluation Panel, except in an advisory capacity. To ensure transparency, members of the Tender Evaluation Panel shall not be directly involved in the approval of any award of contract.

## 2.3 Bidders Selection Criteria

Construction activities are generally prone to risks, which affect the final project performance. Therefore, a construction client must ensure that the most crucial task of selecting a suitable contractor is successfully carried out to achieve an acceptable project result. Comparing bid prices is a commonly done practice in many organizations and often times the only criterion when selecting contractors, which has often been subjected to criticisms. The lowest bidding price may not inevitably benefit the client as the quality and Period of the project may be undermined. But it is motley selected by tenderer. Bid evaluation by contractors may implicate the comparison of different criteria assessed

according to different gauges, as different decision makers have different preferences Have stated that [33] [34] [35]. Thus, there is no general consensus on a common set of selection criteria for the selection of contractor according to the unique nature of each project. Previous literature has highlighted various contractor selection criteria, but in a real practice setting, clients will nevertheless possess their own different criteria. This part of the literature review is focused on identifying critical selection criteria for selecting bidders for construction projects. Content analysis on previous related studies has yielded the generalized categorization of contractor selection criteria into seven main categories. They include management capability, financial capacity, experience, resources, technical environmental health and safety (EHS) and others. The classification has been summarized in Table 2.1.

Table 2:1 Bidder's selection criteria

| **St. No** | **Category** | **Bidders Selection Criteria** | **Reference** |
|---|---|---|---|
| 1 | Management capability | □ Client-contractor relationship<br>□ Reputation<br>□ Project management<br>□ Company management<br>□ Client satisfaction<br>□ Length of time in business | [11]<br>[12]<br>[13]<br>[17]<br>[18]<br>[19] |
| 2 | Financial capability | □ Financial condition<br>□ Financial guarantee<br>□ Company assets<br>□ Credit rating<br>□ Cash in hand<br>□ Financial management<br>□ Company turnover<br>□ Liability | [11]<br>[12]<br>[13]<br>[16]<br>[18]<br>[19] |
| 3 | Experience | □ Past job performance<br>□ Past similar experience<br>□ Staff experience<br>□ Experience in the region<br>□ Past failure<br>□ Size of past projects<br>□ Number of past projects | [11]<br>[12]<br>[13]<br>[18]<br>[19] |

| | | | |
|---|---|---|---|
| 4 | Resource | □ Equipment and tools<br>□ Technical manpower<br>□ Project in hand<br>□ Number of staff<br>□ Progress of existing projects<br>□ Machinery | [12]<br>[13]<br>[15]<br>[19] |
| 5 | Technical | □ Company competency<br>□ Staff qualification<br>□ Quality management<br>□ Staff competency<br>□ Work method<br>□ Technology<br>□ Quality assurance | [11]<br>[12]<br>[13]<br>[19] |
| 6 | Environmental, Health and Safety | □ Health and Safety Management<br>□ Environmental Management<br>□ Health and Safety Experience<br>□ Accident Rate<br>□ Safety Rate | [12]<br>[13]<br>[15]<br>[12] |
| 7 | Others | □ Time completion<br>□ Risk management<br>□ Political consideration | [11]<br>[12]<br>[14]<br>[16] |

## 2.4 Selecting Construction Bidder

Selecting a construction bidder's one of major decisions which may influence the progress and success of any construction project. Public construction bidder prequalification is a commonly used process for identifying qualified, sound and reliable construction bidders. A general prequalification exercise is performed to identify an appropriate i.e. the best, bidder from the applicants and to evaluate and score them according to their economic and technical aspects, quality standards, past performance and other characteristics. Various procedures, such as open tendering, restricted tendering or negotiation, are practiced for bidder's selection. A bidder is selected either from all the bidders or the bidder's selection process can be divided into two phases: prequalification and final selection. Bidder's prequalification involves a screening procedure based on a set of criteria set forth by each individual owner [1]. Bidder's prequalification is generally preferred by clients to minimize risks and failures and to enhance the performance levels of selected bidders by means of established minimal capacities below which contractors will not be considered as pointed out by Palaneeaswaran [2]. Bidding practices in Australia, Canada, Saudi Arabia, Singapore, the UK and the USA.

In the case of a governmental project, bidder's selection by means of a bidding mechanism is required by law as examined by F. Ling [3]. However, the traditional forms of procurement and tendering, supported by prescriptive, solution-based specifications, and the lowest price only, are suitable for routine projects but will hamper innovation in other types of projects. Selection of the lowest bidding contractor is one of the major causes of the poor performance of a construction project; as state that G. Ang *et al* [4]. The bidder's qualification (i.e. financial strength, past experience, business plan, work capacity, quality and experience of the technical personnel, etc.), and project characteristics (i.e. work schedule, type, value, duration, complexity, location of a project, contract type and variation between the contractor's bid price and the next lowest bidder's price etc.) are the fundamental factors that affect contractor default [5]. Time-delays and cost-increases of construction projects are closely related to specifications on the qualifications of contractors (financial, technical, experience, etc.) [6]. in construction projects, quality performance of constructors is considered as vital for client satisfaction [7]. The selection of a construction contractor is a decision characterized by multiple objectives [8]. Selection of the most suitable procurement route and tendering requires a broad analysis of the project characteristics and specific requirements of the client, i e his/her ambitions and risks. Clients' goals and objectives are concerned with the afore mentioned project aspects etc. Cost, time and quality). Based on these main aspects, a list of criteria can be generated. Numerous researchers, such as J. Russell et al [1], S. Ng and R. Skit more [9], C. Wong *et al* [10, 11], K. Molenaar and D. Johnson [12], Y. Topcu [13], and E.

Zavadskas *et al* [14] have identified common criteria for prequalification and bid evaluation. G. Holt and D. Edwards [15] provide qualitative analysis that identifies criteria to be considered when evaluating and selecting a domestic builder. Contractor multi-criteria evaluation has received a sufficient attention of research professionals. Y. Topcu [13], K. Al-Harbi [16], P. Fong e*t al* [17] solve the problem of prequalification and final bidder's selection by applying the analytical hierarchy process (AHP) that allows the Consideration of multiple criteria. As pointed out by K. Al-Harbi [16] AHP allows group decision-making where group members can use their experience, values and knowledge to

Break down the contractor prequalification problem into a hierarchy and solve it by the AHP steps. The construction bidder's selection model introduced P. Fong et al [17] helps

construction clients to identify bidders with the best potential to deliver satisfactory outcomes in a final contractor selection process which is not based simply on the lowest bid. A. Andruškevičius [18] used the method of multi-criteria complex proportional assessment (COPRAS) for contractor evaluation. N. Kvederytė et al [19] study contractor selection as a constituent of a building life cycle. Z. Hatush and M. Skitmore [8] proposed a multi-criteria decision analysis technique for contractor selection and bid evaluation based on the utility theory. J. Minchin et al [20] proposed an innovative model, called the Quality-Based Performance Rating (QBPR) system, for bidder's selection. K. Lam et al [21] proposed a fuzzy neutral network (FNN) model, based on the fuzzy set and neutral network theories, for contractor prequalification and selection. A. Paul and G. Gutierrez [22] studied project contracting from the perspective of bidding price. They used a stochastic model to compare the expected price fetched by some commonly used contract forms. R. Kandalama et al [23] proposed a conceptual model of automation of pre bidding process in order to increase bid-process efficiency and to minimize possible human errors and the risks associated with this process. L. Shen et al [24] developed a computer-aided decision support system for assessing a bidder's competitiveness. Measures of competitiveness are employed to describe a bidder's strengths and weaknesses, thus assisting clients in identifying proper contractors at the pre-qualification stage. H. Tserng and P. Lin [25] prescribe an accelerated subcontracting and procuring model for construction projects. The proposed model uses IT to speed up the construction project subcontracting process, helps to improve the obvious limitations of traditional processes of selecting subcontractors, including the overly limited time for selection, high levels of uncertainty, and difficulties in judging quality. The review of literature revealed the existence of various criteria, methods and IT use for contractor prequalification and bid evaluation.

## 2.5 Size of Bid Evaluation Team

In some countries like Uganda, the evaluation panel should not consist of more than five members. Beside that of Uganda, the Public Procurement Act of Ghana stated that bid

Evaluation panel should not be more than five members constituted for a specific procurement package. The members of the evaluation panel shall in all cases are a minimum of three as States [26].

## 2.6 Activities of Tender Evaluation Team

Bid evaluation must be based on criteria set in bidding documents. This is to ensure uniformity and transparency with standards on every bid assessment. Evaluation is conducted by a designated evaluation team/committee and in accordance with the relevant regulations, rules and procedures. This done using the bidder's qualification criteria and method pre-determined in the solicitation document. In so doing, evaluation may be fair and unbiased [26]. Tender evaluation must be carried out by a suitably competent evaluation team and in accordance with the general law and Treaty principles of equal treatment, non-discrimination, and transparency. The confidentiality of the information acquired by those involved in the evaluation process must be preserved.

### 2.7.2. Meeting of Tender Evaluation Panel

According to [38], of Uganda, the quorum for a meeting of the contracts committee shall be any three members. The chairperson and members of a contracts committee shall be paid such remuneration and at such rates in consultation with the Minister responsible for Public service.

The Procurement Act of Ghana and Procurement Regulation of Zambia states that the number of members of the evaluation committee shall however; depend on the value and complexity of the procurement requirement. The Procurement Regulation of Zambia states that the members of the evaluation panel shall in all assess be a minimum of three whiles that of Ghana demands a minimum of three panel members.

The Secretary to the Tender Evaluation Panel shall record minutes of all Panel meetings, which shall include a register of attendance, list of all submissions considered and the recommendations made, any conflicts of interest declared by members and any dissenting opinions among Tender Evaluation Panel members. Where any member of the Tender Evaluation Panel has a conflict of interest in any tender evaluation, he/she shall declare his interest in the tender, leave the meeting while the matter is considered and shall not participate in the deliberations or decision-making process of the Panel in relation to that submission. In Nigeria the Secretary of the Tenders Board shall be the Chairperson of the Technical Evaluation Subcommittee.

[39] in a study identified that, the tender committee members in most districts in Ghana do not meet to form quorum. The reason given was that members of these committees mostly offer these services for free. It is therefore necessary to reward members for their work.

### 2.7.3 Key Decisions Taken During Tender Evaluation

According to [40], the successful bid shall be that submitted by the lowest evaluated cost bidder from the tenderers responsive as to the bid solicitation, but need not necessarily be the lowest bidder provided. Similarly, The Public Procurement Act 663 of Ghana also states that, the lowest evaluated tender is selected and recommended for the award of the contract.

Many countries have introduced modifications, involving clearly defined procedures for tender evaluation, to this lowest tenderer criterion [41]. In Denmark, for example, the two highest and the two lowest tenders are excluded and the closest to the average of the remaining tenders is selected. A similar procedure is used in Italy, Portugal, Peru, and South Korea, but with only the lowest and highest being excluded. In Saudi Arabia, the lowest tenderer is selected provided that the tender is not less than 70% of the owner's cost estimate. In Canada and the U.S.A., especially in the public sector, the "lowest tenderer" is selected, but a tender bond in an amount equal to 10% of the tender price also has to be provided. In Scotland, it is a policy to award contracts on the basis of Most Economically Advantageous Tender (MEAT), evaluating both the price and quality of the tenders submitted. Quality can include a number of factors including technical merit and functional characteristics [42]. The French practice however, excludes tenders which appear to be abnormally low. In all cases, tender prices are the sole basis for contractor selection and competition cited in [41]. [44] [45] however argues that, governments are not and should never be obliged to accept the lowest tender. Good reason may exist why the lowest tender should not be awarded. There may be doubts, for instance, on the quality of product or service offered by tenderer.

## 2.8 Tender Evaluation Panel Activities

Evaluation is conducted by a designated evaluation team and in accordance with the relevant regulations, rules and procedures, using the evaluation criteria and method pre-determined in the solicitation document in order to conduct a fair and unbiased evaluation (UN, 2006) [46]

Public Procurement [47] stated that procurement entity shall evaluate and compare the tenders that have been accepted in order to ascertain the successful tender in accordance with

the procedures and criteria set out in the invitation documents. No criterion shall be used that has not been set out in the invitation documents.

By far the most frequently used method of selecting construction contractors is competitive tendering, in which the lowest evaluated tenderer is awarded the contract.

Similarly, the EU procurement directives stipulate that public contracts are awarded to the lowest bidder or to the bidder with the economically most advantageous offer; the latter requiring that a scoring rule must be specified (Bergman and Lundberg, n.d). The economically most advantageous bid can be the bid with the highest quality for a given price, in so-called beauty contests. It can also be the bid that achieves the highest combined price and quality score. The latter method falls into two main categories. First, quality can be evaluated in monetary terms, so that quality value in excess of the minimum requirement can be subtracted from the price bid or, alternatively, so that the value of the quality gap relative to the maximum quality level can be added to the price bid. This method can be seen as a quality-adjusted lowest-price tender; here the expression quality-to-price scoring will be used. Second, price can be transformed into a score that is added to the quality score, making the tender a price-adjusted highest-quality tender.

In Ghana, the lowest evaluated tender is selected and recommended for the award of the contract [47] In other words, the responsive tenderer who satisfied the Post-Qualification Evaluation requirements and offered the least evaluated tender price is the first to be considered for the award of the contract.

## 2.9 Tender Evaluation and Contract Selection

Under the Public Procurement Act (PPA) of Ghana [47], National Competitive Tendering (NCT) procedures are employed if only domestic suppliers or contractors are desired to submit tenders and International Competitive Tendering (ICT) is to be used where open competitive tendering is employed. The evaluation of tenders received is normally carried out in three stages. These are preliminary examination, detailed examination and post qualification evaluation.

### 2.9.1 Preliminary Examination

This is carried out to identify and reject tenders that are incomplete, invalid or substantially non-responsive to the tender document and therefore would not be onside red further. Under this section of the evaluation of tenders, the following parameters are checked:

- Verification: Here, tenders are scrutinized to establish whether they were signed by the appropriate authority within the firm. In Ghana, Tenders are also checked of mandatory requirements [52]. In Nigeria, the Bureau of Public Procurement [51] states that, the verification step is done to ascertain whether the tenderer is eligible. Eligibility: Tenders are checked to determine whether they are from eligible countries as per the instructions to tenderers and whether they provide documentary information of their registration. In this case, a Certificate of Incorporation/Registration is looked out for.
- Tender Security: The Public Procurement [50] requires that all tenders are provided with tender securities. Every Invitation for Tender (IFT) therefore captures this and specifies an amount or sum of Tender Security, or Tender Bond to be provided by all tenderers. This is therefore checked to ensure that all tenderers provide the facility adequately. Tender Security Declarations are also accepted as an alternative. If the Procuring Entity tends to reject incomplete bids, it shall be clearly stated in the bidding documents. If Procuring Entity intends to consider incomplete bids, the bidding document shall specify the minimum number of items for which prices must be quoted in the bid, or the minimum value of the items to be quoted.
- Completeness of Tenders: In terms of the completeness of tenders, tenders received are to ensure that they submit complete tendering documents and that all the items of the Bill of Quantities (BOQ) provided in the tendering documents are wholly priced. According to the Nigeria Bureau of Public Procurement [51], if the Procuring Entity intends to reject incomplete bids, it shall be clearly stated in the bidding documents. If Procuring Entity intends to consider incomplete bids, the bidding document shall specify the minimum number of items for which prices must be quoted in the bid, or the minimum value of the items to be quoted.

- Substantial Responsiveness: Tenders that meet the above requirements are determined to be substantially responsive and are taken through detailed examination.

### 2.9.2 Detailed Examination

- Only tenders that survive the preliminary examination are considered for further evaluation [52]. This further evaluation involves the correction of arithmetic errors and comparison of tenders. There are two stages involved:
- Correction of Arithmetic Errors: The priced BOQs of the responsive tenders are checked for arithmetic errors in extensions, summations, transfers and summaries. Errors detected are corrected in accordance with the tender guidelines provided by the Board of the Public Procurement Act 663, 2003[50]. A notice is sent to the affected tenderer(s), giving details of the errors and the adjusted figure(s) which they have to either accept or decline.
- Evaluation and Comparison of Tenders: The evaluated (corrected or discounted) tender prices are determined by subtracting provisional sums, discounts offered and contingencies in the summary of the BOQs. The evaluated tender prices of the responsive tenders are then ranked in ascending order [52].
- According to Nigeria Bureau of Public Procurement [51], deviation from any provisions of the bidding documents (instruction to bidders, Bid Form, price schedules, Bills of Quantities, condition of contracts and technical specifications, etc.) is a common feature in many Bids [49]

### 2.9.3 Contractor Selection

- A successful tenderer must meet all the minimum qualifying criteria stated in the tender document. The lowest evaluated tender is selected and recommended for the award of the contract [49] In other words, the responsive tenderer who satisfied the Post-Qualification Evaluation requirements and offered the least evaluated tender price is the first to be considered for the award of the contract.

[57] stated that after determining the lowest evaluated price, the Tenderer's capability and resources available to carry out the work should be cross-checked. It is the review process carried out by the evaluation panel to ascertain whether the tenderer offered the lowest evaluated tender price has the capacity or resources to carry out the contract effectively.

Again the document summarized and stated that the Tender Evaluation procedures involve two stages:

- Assessment of Information submitted which involves verification of information submitted or provided by the Tenderer, in response to the tender document.
- The second stage is the Tender Evaluation Report which captures all the tendering processes, from advertisement, Tender submission and evaluation, in concise manner at the same time conveys, clearly, all the issues considered in arriving at the recommendation for the award of the contract.

Also in South Africa, tender evaluation stages as described by the National Treasury involves request for invitation of tenders, calling for tenders, submission and receiving of tenders, opening of tenders, assessing of tenders and awarding tenders. In the Chadian Public Procurement Act, tender evaluation stages are fully described in articles Compared to the PPA 663 of Ghana, it appears that the following six steps form the structure of tender evaluation process: Submission of tender, Opening of tenders, Examination of tenders, Responsiveness of tenders, Evaluation of tenders and Tender evaluation report.

In the light of the above descriptions or propositions of steps or activities, it could be concluded that Tender Evaluation Process varies little from one country to another and from one institution to another. But, in essence, TEP involves the following five main steps, it is described with detail below in a chronological order: Submission, opening, examination, evaluation, and reporting.

### 2.9.4 Post-Qualification Evaluation

According to PPA 2003, Post-Qualification of the lowest evaluated responsive contract. Using the criteria specified in the Tender Document, this review should include an assessment of the tenderer's financial and physical resources available to undertake the contract, including his current workload.

In Ghana, if the lowest evaluated responsive tenderer fails post-qualification, his Tender should be rejected, and the next ranked tenderer should then be subjected to post-qualification examination. If successful, this tenderer should receive the award. If not, the process continues for the other tenderers.

In Zambia, A procuring entity shall, where it determines that a bidder is not qualified, reject the bid and conduct a post qualification on the bidder who submitted the next lowest evaluated responsive bid [59] stated that the choice of the route depends on the procurement entity. The exercise applies the following checks, as set out in the tender documents:

- Experience in Similar Works: The experience of tenderers, as Prime Contractor or Main Contractor, in works of similar nature and complexity are assessed. A minimum threshold established in the tender document is used.
- Personnel Capability: The experience and qualification of key personnel in the firm is also assessed. Minimum thresholds established earlier are used.
- Financial Capability: Tenderers are required to submit certified Financial Statements and these are assessed to ascertain whether they have adequate financial capabilities to execute the contract. This coupled with undertakings or declarations from companies,, bankers also indicate the adequacy of the lines of credit available to the tenderers.
- Equipment Holding: Thresholds established are used to check the appropriateness of the equipment provided in documentary evidence by the contractors for the specified financial classes.
- History of Litigation: Tenderers are also required to provide evidence of non-involvement in litigation, or the history and details of any such litigation.
- Annual Turnover: Qualified tenderers must meet the minimum annual turnover thresholds specified for the particular financial class.
- Methodology/Works Program: After the contract has been won it is important for the work to be completed on time and to the required standard (quality) and within budget, therefore tenderers are required to provide method statements and programs of work, which are compared with the Master Program.

## 2.10 Effects of Tender Evaluation Decisions

According to [60], traditional forms of procurement and tendering, supported by prescriptive, solution- based specifications and the lowest price only, are suitable for routine projects but will hamper innovation in other types of projects. Selection of the lowest bidding contractor is one of the major causes of the poor performance of a construction project. Time-delays

and cost-increases of construction projects are closely related to specifications on the qualifications of contractors financial, technical, experience, etc. [61].

Selection contractor based on the price of the lowest bidding contractor alone is one of the major causes of the poor performance of a construction project [62]. Time-delays and cost-increases of construction projects are closely related to specifications on the qualifications of contractors (financial, technical, experience, etc.). In effect Lingard et al (n.d) stated that, Contractor selection systems should be subject to a cost-benefit analysis. From this, selection of contractors is a very critical issue and if not well considered, it could go a long way to affect the project time, cost and quality.

## 2.11 Bottlenecks In Tender Evaluation

[63] Attributes the causes of the delays to extensive post-award negotiations, delays in the preparation of technical specifications and drawings, delays in evaluation, an extensive system of controls, reviews and approvals, and land ownership disputes.

In a brief literature [64]. stated that, Government procurements are normally made through tendering method, which is generally said to be transparent. However, the observations concluded that in tendering method, there is high possibility of the lowest evaluated tenderer, who sells at lower prices to win. This is done without effective consideration of other factors like quality, delivery and financial position.

Public Life [65] identified several forms of corruption which include; influencing of the law-making process; forming of cartels by tenderers; bribing of the decision makers in order to win tenders; conflict of interest and massaging of the processes to favor a particular tenderer. Corruption also manifests itself in various forms including; bribery, embezzlement, fraud, favoritism, extortion, conflict of interest, political bargains, abuse of discretion and abuse of power [66].

According to [67], tender evaluation stage of the procurement process is the most susceptible to corrupt practices and the evaluation panel as provided by the law should therefore be given a close monitoring to foil any attempt by unscrupulous tenderers to bribe official at this stage. It is worth noting that a lot of things happen during this stage and evaluation panel are sometimes pressurized to disqualify the most competitive tender and rather recommend favorites of politicians or those in authority. Other times corrupt tenderers pay their way

through the evaluation team to use all foul means to disqualify other tenderers to their advantage.

To prepare for a tender is both time-consuming and costly, and offering a bribe may be seen as a shortcut to a contract award. Motives for bribery include, for example, gaining information, speeding up bureaucratic processes, receiving preferential treatment, disqualifying competitors, getting away with substandard work, influencing outcomes of legal and regulatory processes, and influencing the allocation of benefits such as subsidies, taxes, and pensions.

Also, according to [68], another bottleneck on evaluation that affects procurement in most districts in Ghana is that, the tender committee members at times do not meet to form quorum and the reason given was that members of these committees mostly offer these services for free. Other problems identified include the delays in the preparation of tender documents and reports.

# CHAPTER THREE

## 3. METHODOLOGY

### 3.1 Study Area

The research was conducted with in public building construction project located in Jimma city.

Jimma Zone is located in the Oromia National, Regional State, and Southwest Ethiopia (Fig.3.1). Jimma town is the capital and administrative center of the Zone and is located at a distance of 350 km away from the capital of Ethiopia-Addis Ababa. The study area is situated between 1689 and 3018 m.a.s.l. (meter above sea level) and receives an average rainfall between 1200 and 2400 mm per. annum. And the warmest month (with the highest average high temperature) is February (29c). Months with the lowest average high temperature are June and July (24c). Months with the high average lowest temperature are March, April and May (20c). The coldest month's (with the lowest average low temperature) is December (17c).

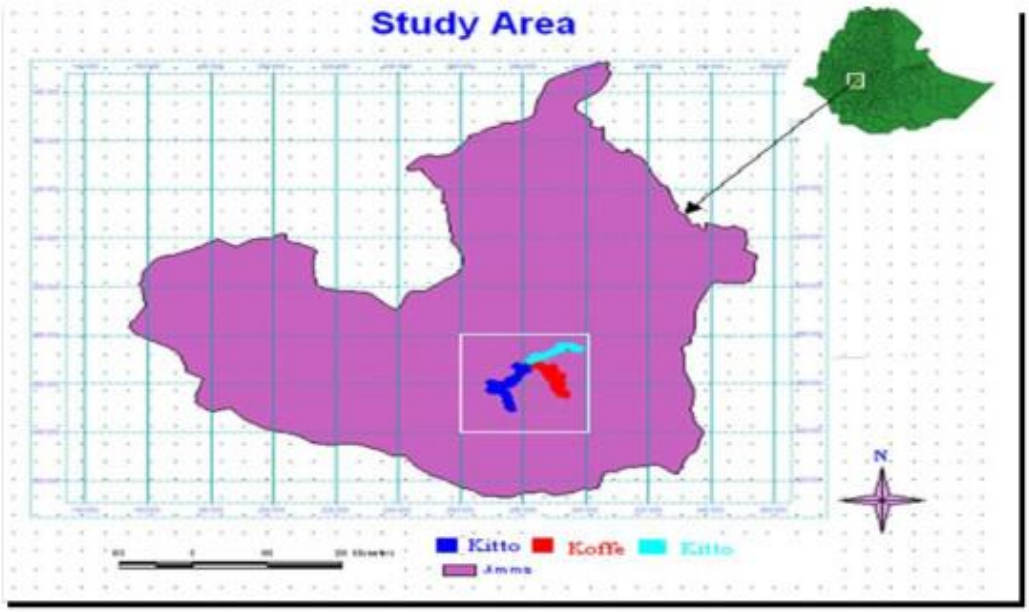


Figure 3.1 study area

### 3.2 Study Design

Study design, qualitative in nature and start with determining study population; and sample size was determined purposively. Then data collection was made according to stated methodology.

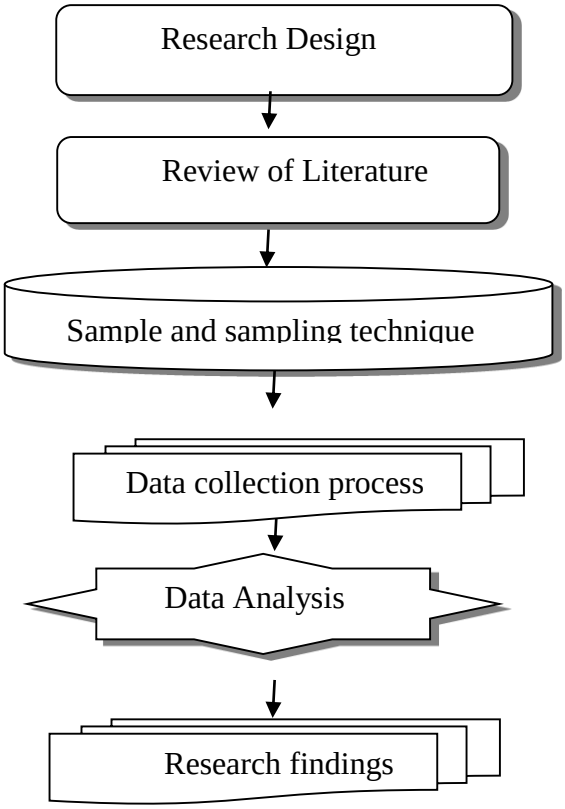


Figure 3.2: Study design

### 3.3 Population

The respondent in this thesis was employees of a public building Construction Company, company leaders. A client and consultant engineer, especially client and consultants have knowledge of construction, according to their importance successful accomplishment of the research study was made.

## 3.4 Sampling Size and Sampling procedures

### 3.4.1 Sample Size

The sample size used must represent the study population and this involves identifying and selecting individuals or groups of individuals that are especially skill about the study. In this cases study 40 questionnaires were distributed and 34 questioners and interviews was collected.

### 3.4.2 Sampling Technique or Procedure

The way of sampling by the researcher was using purposive sampling technique, purposive sampling is selected by someone arbitrary method, it is known to be representative of the total population, or it is known that it was produced well matched groups. The idea is peaking out the sample in relation to some bidder's qualification criteria; which are considered important for the particular study.

## 3.5 Nature and Sources of Data

The researcher used qualitative data through the questionnaires, from the literature review of Metropolitan, municipal and district assembly and personal interview.

## 3.6 Data Collection Process

### 3.6.1 Questionnaire

The main questionnaire consists of three Part. The first part gathers respondents. Personal Information, the second part investigates stakeholder's perception on of the effectiveness of Current bidder's qualification criteria evaluation system for public building construction Projects in Jimma city and the last part examines critical part of questions, and interview Bidder's qualification criteria for evaluating bids in public building construction projects in Jimma city. The questionnaire survey was designed to apprehend the respondents. Respondents were given with a statement, and then they were requested to provide their replies with variable degrees of strongly disagree, Disagree, neither Agree/dis agrees, agree, and strongly agree Scales. Respondent's attitudes are measured Using the strongly disagree, Disagree, neither agree/did agree, agree, strongly agree 5 points Liker scale ranging from "1" (strongly disagreed) to "5" (strongly agreed).

Data Collection was done after reviewing the literature and conducting the pilot survey on the situation of the public building Construction Project, tools used in this research were questionnaire and interview. The questionnaire is considered as the basic or the heart of a survey operation.

### 3.7 Data Analysis

The data are analyzed using various methods such as descriptive statistical method of analysis and the findings describe and presented in the form of tables, graphs and chart format.

Defines a case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clearly defined [24].

Each project was detailed studied and presented using employer evaluation methods and studied accordance with an international approach.

### 3.8 Relative Importance Index (RII)

To mathematically determine the importance level of each bidder's qualification criteria, the Relative Importance Index (RII) analysis is employed. RII is a form of relative importance index analyses. RII is used for the analysis because it best fits the aim of this study or this paper. This calculation method was used by [26], where RII is calculated to quantify project delay factor. [1] Also adopted the same method, where the Procrastination Factors among university Students are ranked [1]. Furthermore used the same approach in the study of assessments of bidder's qualification criteria. Therefore, since this study shares the multi-attributes characteristics with those studies, a similar method is used in this study. The equation to calculate RII for each item is shown as in (1).

Relative Importance Index $= (\sum Wi)/ (A*N)$ (1)

Where,

W = Weighting given to each item by each respondent

N = Total number of respondents

A = Highest available weight (in this study it is 5 to represent "strongly agreed")

The RII value will have a range of $> 0$ and $\leq 1$

Where the higher the RII, the more important will the item be. The items are then ranked in their respective RIIs. These rankings make it possible to compare the relative importance of each factor as expressed by the respondents. A table of bidder's qualification criteria arranged in terms of RII is used to assess and give an overall view of the importance of each item. This table helps to build the frame work of bidder's qualification criteria for public construction projects in Jimma city.

## 3.9 Study Variables

**Dependent variables**: Assessment of bidder's qualification criteria in tender evaluation Process.

**In dependent variables:**

- ✓ Management capability
- ✓ Financial capability
- ✓ Experience
- ✓ Technical
- ✓ Resource
- ✓ Environmental
- ✓ Health and Safety
- ✓ Others (Time completion, Risk management, Political consideration)

.

# CHAPTER FOUR

# 4. DATA PRESENTATION AND ANALYSIS

## 4.1 INTRODUCTION

This chapter presents a detailed analysis of the data obtained from the field source. The data were processed using Statistical Package for Social Sciences (SPSS) and presented with tables, graphs, and charts before analysis was made. All the data used in this analysis was first-hand information collected from the sample of data. The total number of questionnaires administered was forty, but only thirty-four was received and analyzed. This represents 85% response rate. 75% or more response rate is considered ideal for paper based questionnaires than online surveys [26]. Majority of the respondents was part of the bid Evaluation team of their district. This meant that they would be able to offer accurate information with regards to bid Evaluation and how things are done in their various organizations.

## 4.2 Research Population and Sampling

### 4.2.1 General Information

A total of 40 questionnaires distributed among professionals who are working for public building construction project, client, and consulting offices at a distribution shown in the Table 4.1: The questionnaire distributed to each respondent in person and collected in the same way.

Table 4.1: Questionnaires distributed to each party and returned back

| St. No | Respondent | Distributed | Returned | Not Returned | Responding |
|---|---|---|---|---|---|
| 1 | Client side | 27 | 22 | 4 | 22 |
| 2 | Consultant side | 13 | 12 | 2 | 12 |
| 3 | Aggregate | 40 | 34 | 6 | 34 |

Source: From field data

Respondents are selected with a special focus or purposefully to meet the target group, thus client side respondents are those who have been working on the tender preparation of bid respondents are professionals who have been Working in a position of General Manager,

Branch manager, project manager, technical manager, coordinator, office engineer, assistant resident engineer, project engineer, Resident of private consulting firms of class 2 and above Architects and engineers consulting firms. Also, some of them are construction management consultants.

## 4.3. Demographic Data

Table 4.2: represented the findings of the demographic data. Out of the total 40 respondents, 85.29% of the respondents are male, and remaining 14.71 % are female. It is commonly known that the construction industry is mostly subjugated by males and this wide range of gap between males and females demonstrates the male domination in Jimma city public building construction projects.

Table 4.2: Demographic Data

| St. No | Gender | N | Gender In Percentage (%) |
|---|---|---|---|
| 1 | Male | 29 | 85.29 |
| 2 | Female | 5 | 14.71 |
| 3 | Total | 34 | 100 |

Source: From field data

## 4.4 Interview

### 4.4.1 Respondent Distribution

Table 4.3: shown below from the 40 invitations sent for interview, a number of 34 completed responses were received. 60% of respondent were Client and 40% of the respond were Consultant.

Table 4.3: Interview sample characteristics

| St. No. | Respondent | Total Contacted | Total Response | Response Rate In Percentage (%) |
|---|---|---|---|---|
| 1 | **Client** | 24 | 20 | 60% |
| 2 | **Consultant** | 16 | 14 | 40% |
| | **Total** | 40 | 34 | 100% |

Source: From field data

## 4.5 Respondents Position In The Company

Table 4.4: shown below, four respondents were Resident Engineer, two respondents were Assistant Resident Engineer, one was Coordinator, three respondents were Office Engineer, two respondents were Branch manager, four respondents were Site Engineer, eight respondents were Supervisor, one respondent were Civil Work Engineer, one respondents were Quantity Surveyor, one respondents were General Team Leader, one respondents were Structural Engineer, two respondents we're Engineering Group Leader

Table 4.4: Respondents Position in the company

| St. No | Position | Frequency |
|---|---|---|
| 1 | Resident Engineer | 4 |
| 2 | Assistant Resident Engineer | 2 |
| 3 | Coordinator | 1 |
| 4 | Office Engineer | 3 |
| 5 | Branch manager | 2 |
| 6 | Site Engineer | 4 |
| 7 | Supervisor | 8 |
| 9 | Civil work Engineer | 5 |
| 10 | Quantity Surveyor | 1 |
| 11 | General Team Leader | 1 |
| 12 | Structural Engineer | 1 |
| 13 | Engineering Group Leader | 2 |
| | Total | 34 |

Source: From field data

### 4.5.1 Client Side Respondent's Position

Table 4.5: shown below, three respondents were site engineer, six respondents were Supervisor, one respondent were Building Add, one respondent were Civil Work Engineer, one respondent were Quantity surveyor, one respondent were Office engineer, one respondent were Project engineer, one respondent were General Team lead, two respondents were engineer, one respondent were Structural engineer, one respondent Project supervisor, one respondent were Engineering Group leader.

Table 4.5: client side Position in the company

| St. No. | Position | Frequency |
|---|---|---|
| 1 | Site engineer | 3 |
| 2 | Supervisor | 6 |
| 3 | Building Add | 1 |
| 4 | Civil work Engineer | 1 |
| 5 | Quantity surveyor | 1 |
| 6 | Office engineer | 1 |
| 7 | Project engineer | 1 |
| 8 | General Team leader | 1 |
| 9 | Engineer | 2 |
| 10 | Structural engineer | 1 |
| 11 | Project supervisor | 1 |
| 12 | Engineering Group leader | 1 |
| | TOTAL | 20 |

Source: From field data

### 4.5.2 Consultant Side Respondents Position

Table 4.6: shown below, four respondents were Resident Engineer, two respondents were Assistant Resident Engineer, one respondent were Coordinator, two respondents were Office Engineer, two respondents were Branch manager, one respondent were Project engineer, one respondent were Project engineer, one respondent were Site Engineer, one respondent were E. Group Leader.

Table 4.6: Consultant side Position in the company

| St. No | Position | Frequency |
|---|---|---|
| 1 | Resident Engineer | 4 |
| 2 | Assistant Resident Engineer | 2 |
| 3 | Coordinator | 1 |
| 4 | Office Engineer | 2 |
| 5 | Branch manager | 2 |
| 6 | Project engineer | 1 |
| 7 | Site Engineer | 1 |
| 8 | Engineering Group Leader | 1 |
| | TOTAL | 14 |

Source: From field data

## 4.6 What Tendering Procedures used For Contractor's Selection?

Respondents were asked what tendering procedure they used for contractor selection. Regarding the procedure, 67.6 % of the respondents use two-stage selection, i.e. prequalification and final selection. 11.8 % of the respondents have survey of prices, 11.8 % of the respondents carry out the negotiations. However, only 8.8 % of the respondents use restricted tendering. There was a clear preference for using a survey of prices against a common one-stage or two-stage tendering procedure [26].

Table 4.7. What tendering procedures used for contractor's selection ?

| St. No. | Tendering procedures | Frequency | Frequency In Percent (%) |
|---|---|---|---|
| 1 | Survey price | 4 | 11.8 |
| 2 | Negotiations | 4 | 11.8 |
| 3 | Restricted Biding | 3 | 8.8 |
| 4 | Two stage selection(prequalification & final selection) | 23 | 67.6 |
| | Total | 34 | 100.0 |

Source: From field data

## 4.7 How do you Determine Contractor Qualification Criteria?

After analyzing the bidding goals, the respondents were asked how they determined selection criteria. Attitude towards contractors' selection criteria is presented in Fig 4.8. There was a clear preference to determination of selection criteria depending on the project size, type and complexity, i.e. 76.5 % of the respondents determine selection criteria depending on the fact that only 11.8 % follow the regulation of department, and 11.8 % consider the client's requirements. It follows that the contractors have a wider knowledge and experience for subcontractor selection than clients, and they do not make demands on related activity [26].

Table 4.8. How do you determine Contractor qualification criteria?

| St. No | Determinations | Frequency | Frequency In Percent (%) |
|---|---|---|---|
| 1 | Depending on existing fact only | 26 | 76.5 |
| 2 | The regulation of department | 4 | 11.8 |
| 3 | The client's requirements | 4 | 11.8 |
| | Total | 34 | 100.0 |

Source: From field data

## 4.8 How Important The Bid price and Other Three Types of Bidder's Criteria

An official contractor evaluation methodology is based on the bid utility and the lowest bid. However, the current practice of contractor qualification evaluation in Lithuania can be regarded as the lowest bid approach [26]. Therefore, the respondents were asked to evaluate how important the bid price and other three types of contractor evaluation criteria, i e 'legal requirements', 'financial criteria' and 'technical and management criteria', were for them. The respondents assigned 64.7% to 'bid price', 14.7% to 'legal requirements', 8.8% to 'financial criteria' and 11.8% to 'technical and management criteria'.

Table 4. 9. How important the bid price and other three types of bidder's evaluation criteria; legal Requirement, Financial criteria, Technical and Managerial criteria?

| St. No | Evaluation Criteria | Frequency | Frequency In percent (%) |
|---|---|---|---|
| 1 | Bid price' | 22 | 64.7 |
| 2 | Legal requirements | 5 | 14.7 |
| 3 | Financial criteria | 3 | 8.8 |
| 4 | Technical and management criteria | 4 | 11.8 |
| 5 | Total | 34 | 100.0 |

Source: From field data

## 4.9 How Important Separate Bidder's Evaluation Criteria?

The respondents were asked to evaluate how important for them separate contractor selection criteria. Fig 4.10 shows rating of importance of the legal requirements of construction contractors. The respondents considered 'claims and contractual dispute' 55.9%, 'legal activity' 23.5%, and 'failed contracts' 11.8%, as important criteria, and The respondents considered 'claims and contractual dispute' in Fig 4.9 shows rating of importance of the financial criteria. [26].

Table 4. 10. How important separate bidder's evaluation criteria

| St. No | Rating Mechanisms | Frequency | Frequency In Percent (%) |
|---|---|---|---|
| 1 | Claimed and contractual dispute | 19 | 55.9 |
| 2 | Legal activity | 8 | 23.5 |
| 3 | Failed contract | 4 | 11.8 |
| 4 | Bankruptcy possibility | 3 | 8.8 |
| | **Total** | 34 | 100.0 |

Source: From field data

## 4.10 The Bidding Goal of The Company?

Fig4.11 illustrates the bidding goals of the responding companies. 23.5% of the respondents reported that, they use bidding to assure selection of an appropriate contractor. 76.5 % of the respondents reported using a 'standard procedure'. This option was chosen by large contractor organizations, and their number could be explained by the number of companies certified according to ISO 9001 standard. Interestingly, private contractors discount the public opinion, and, consequently, they did not choose 'social responsibilities' option. [26].

Table 4.11. The biding goal of the company?

| St. No | Goal of The company's | Frequency | Frequency In percent (%) |
|---|---|---|---|
| 1 | They used biding to assure selection of an appropriate bidders | 8 | 23.5 |
| 2 | Using standard procedures | 26 | 76.5 |
| | Total | 34 | 100.0 |

Source: From field data

## 4.11 The Proportion of Respondent's Experience in Construction

Table 4.12: shows the proportion of respondent's experience in construction. Over 52.9 % of the respondents have the requisite construction experience of up to five years, Over 29.4% of the respondents have the requisite construction experience of up to ten years, Over 5.9% ,& Over 11.8% of the respondents have the requisite construction experience of up to ten years of the respondents have the requisite construction experience of up to fifteen years, Having respondents with such an impressive working experience in construction indicates that the respondents are well conversant with selecting suitable contractors to implement projects. This really adds validity to the findings of this study.

Table 4.12. Respondent's experience in construction (years)

| St. No | Experience (In years) | Frequency | Frequency In Percentage (%) |
|---|---|---|---|
| 1 | 0-5 | 18 | 52.9 |
| 2 | 5-10 | 10 | 29.4 |
| 3 | 10-15 | 2 | 5.9 |
| 4 | 15-20 | 4 | 11.8 |
| | Total | 34 | 100.0 |

Source: From field data

## 4.12 Bid Evaluation Team Formation

Table4.13 shows the respondent's Bid Evaluation Team Formation. 82.4% of respondents said, their organization have permanent Bid Evaluation team, this does not conform to Public Procurement, because the Act states that bid evaluation team shall be an ad hoc committee [26]. This means that team shall be formed when the need arises,11.8% of the respondents said their organization have temporary Bid Evaluation team, and 5.9% of the respondent Saied, in their organization Bidder Evaluation Team Formed when needed. According to practices of various countries such as Ghana, Zambia and Nigeria has confirmed what five respondents were saying that bid Evaluation team shall be formed as a when needed.

Table 4.13. Bidder Evaluation Team Formation

| St. No | Team Formation | Frequency | Frequency In Percent (%) |
|---|---|---|---|
| 1 | Permanent Bid Evaluation Team | 28 | 82.4 |
| 2 | Temporary Bid Evaluation Team | 4 | 11.8 |
| 3 | Team formed when needed | 2 | 5.9 |
| | Total | 34 | 100.0 |

Source: From field data

## 4.13 Selection and Dissolution of BET

### 4.13.1 Selection of Bid Evaluation Team

Since more than eighty percent of the officials were members of the bid Evaluation team, they were asked if there was fair selection of the team members. This was also sought due to the non-permanent nature of bid Evaluation team as stated by Public Procurement Authority of Ethiopia.82.4% respondents saw the selection of bid Evaluation team members

as fair and equitability while 11.8% saw it as unfair and unequal selection. Only 5.9% respondent was not sure as to whether it was equal or not equal. This means the panels" recommendations on the award of contract easily will be acceptable to everyone.

Table 4. 14. The biding goal of the company

| St. No | Biding Goal | Frequency | Frequency In percent (%) |
|---|---|---|---|
| 1 | Fair and equitability | 28 | 82.4 |
| 2 | Unequal selection | 4 | 11.8 |
| 3 | Equal or not equal (will be acceptable to everyone) | 2 | 5.9 |
| | **Total** | 34 | 100.0 |

Source: From field data

### 4.13.2 Dissolution of Bid Evaluation Team

The cross tabulation in Table 4.15 shows bid Evaluation Members are invited and how the Team is dissolved afterwards. It was realized that more than 85.3% of the respondents were get dissolved by letter, and the remaining 14.7% of respondents said the dissolution of bid evaluation team done by Verbal communication.

Table 4.15. Dissolution of bid evaluation Team

| St. No | Way of Dissolution | Frequency | Frequency In Percent (%) |
|---|---|---|---|
| 1 | Yes By letter | 29 | 85.3 |
| 2 | Verbal communication | 5 | 14.7 |
| | Total | 34 | 100.0 |

Source: From field data

## 4.14 Criteria Used to Select Bid Evaluation Team

Table 4.15 below shows Among the thirty-four respondents, the choices of criteria used 44.1% were technical skills relevant to the particular project or good Knowledge, the choices of criteria used 23.5% were Experience relevant to procurement requirement, the choices of criteria used 17.6% were End User Representation to procurement requirement, the choices of criteria used 14.7% were Procurement and contracting skills.

Table 4.16. Criteria Used to Select Bid Evaluation Team

| St. No | Qualification Criteria | Frequency | Frequency In Percent (%) |
|---|---|---|---|
| 1 | Technical Skills relevant to the particular project or good knowledge | 15 | 44.1 |
| 2 | Experience relevant to procurement requirement | 8 | 23.5 |
| 3 | End user Representation | 6 | 17.6 |
| 4 | Procurement and contracting skills | 5 | 14.7 |
| | Total | 34 | 100.0 |

Source: From field data

## 4.15 Selection of BET Chairman

The figure 4.1 below shows how the Chairman of the bid Evaluation Panel is selected. 62.5% of respondents show from the chart that the chairman is selected from within the bid Evaluation Team. 25% however shows that the chairman is selected by the bid evaluation Committee of the district. 12.5% of respondents indicated that the chairman is selected by other means such as by the Municipal or District Chief Executive. The Public Procurement was silent about how the chairman of bid evaluation Panel should be selected. Whenever, the Chairman is selected from among the panel, the execution of process goes on smoothly, since there is usually minimal influence [26].

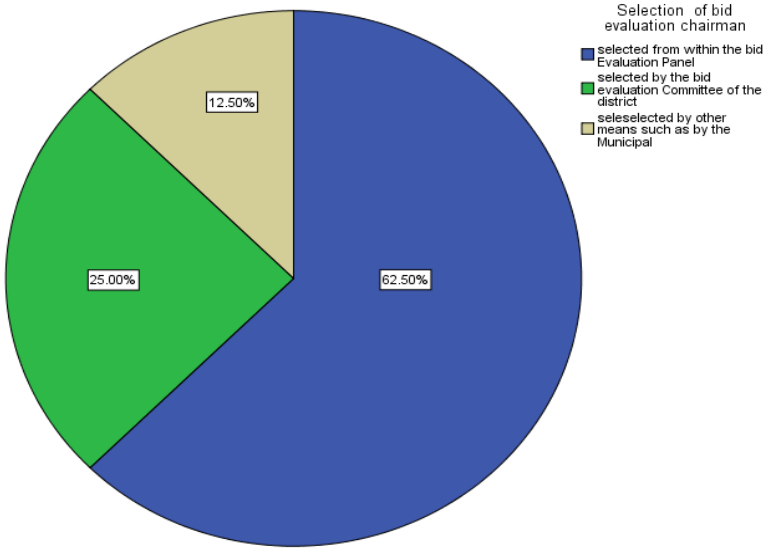


Figure 4.1: Selection of TEP chairman

Source: from field data

### 4.16 Bid Committee Members Work as BET

In some organization bid Committee members also work as bid Evaluation members. This informed the researcher to find out if the phenomenon widespread in the selected organization for the study. According to the Public Procurement it is stated that, the members appointed to the Panel may be staff of the Procurement Unit but no Member of the bidding Committee shall act as a member of the bid Evaluation team, except in an Advisory capacity [26]. Again, to ensure transparency, members of the bid Evaluation committee shall not be directly involved in the approval of any award of contract. When bidding Committee members work as bid Evaluation Members, it leads to conflict of interest and also makes their recommendations of award of contract suspicious. Table 4.18 below shows that exactly 73.5% of bid Committee members work as bid Evaluation panel members. The other 26.5 % do not work as bid Evaluation Panel members.

Table 4.17. Bid committee members working as BET members

| St. No | Working as BET members | Frequency | Frequency In Percent (%) |
|---|---|---|---|
| 1 | Yes | 25 | 73.5 |
| 2 | No | 9 | 26.5 |
| 3 | Total | 34 | 100.0 |

Source: from field data

### 4.17 Size of Bid Evaluation Team

The chart below shows 85.3% of respondents stated that bid Evaluation team consisting three to five members. 8.8% of respondents stated that bid Evaluation team consisting of six-ten members and 5.9% of respondents stated that bid Evaluation Panel consist of eleven-fifteen members. The Evaluation panel should be between three and five members. This will reduce delays in quorum forming to take decision.

Table 4. 18. Size of tender evaluation team

| St. No | Size of Tender Evaluation Team | Frequency | Frequency In Percent (%) |
|---|---|---|---|
| 1 | 3-5 Members | 29 | 85.3 |
| 2 | 6-10 Members | 3 | 8.8 |
| 3 | 11-15Members | 2 | 5.9 |
| 4 | Total | 34 | 100.0 |

Source: from field data

### 4.18 Activities of Bid Evaluation Team

Figure 4.2 below shows that 87.5% of respondents agreed that bid evaluation is done based on criteria set in bidding documents while 12.5% of respondents indicated that bid evaluation is done off criteria set in bidding documents. The reason for the twelve point five percent was that there are external influences on the bid evaluation team that affects the decisions taken by the team. According to Public Procurement, recommendations for award of contract shall be made solely on the basis of information and bidders evaluation qualification criteria provided in the bid documents or request for proposals and without recourse to any extrinsic evidence. In my view, evaluation of bid should be done based on criteria set in the bid document.

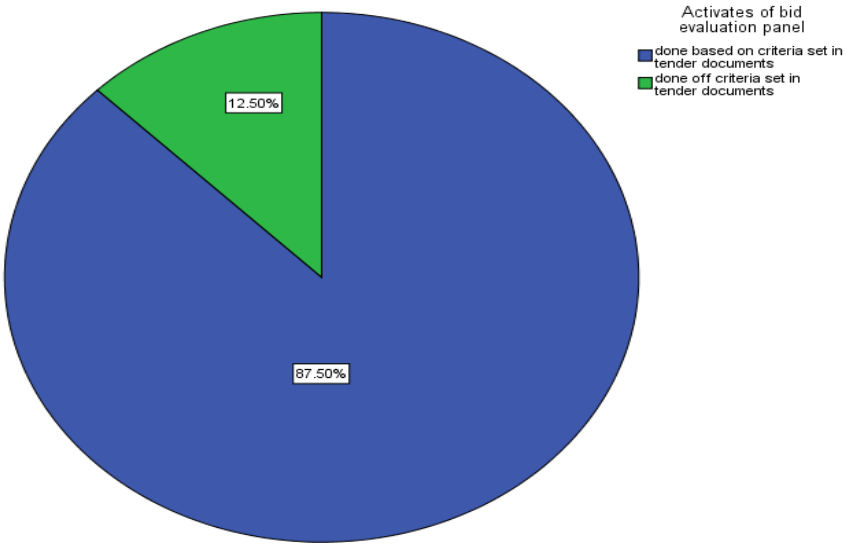


Figure 4.2: Activities of BEP

Source: from field data

### 4.19 Duration of Bid Evaluation Team

The complexity and requirement of bid will definitely determine the time and energy to be invested by the bid Evaluation team. Figure 4.3shown below, 75% of respondents indicated that most bid evaluation activities take less than one week, 25% of respondents took between one and two weeks. The other period was not fixed but dependent on the procurement. The result of respondents indicated that MMDAs are doing the right thing as far as duration of tender evaluation is concerned. According to Public Procurement tender evaluation and submission of report should be between two to Four weeks for both

international competitive tendering and national competitive bidding for works [26

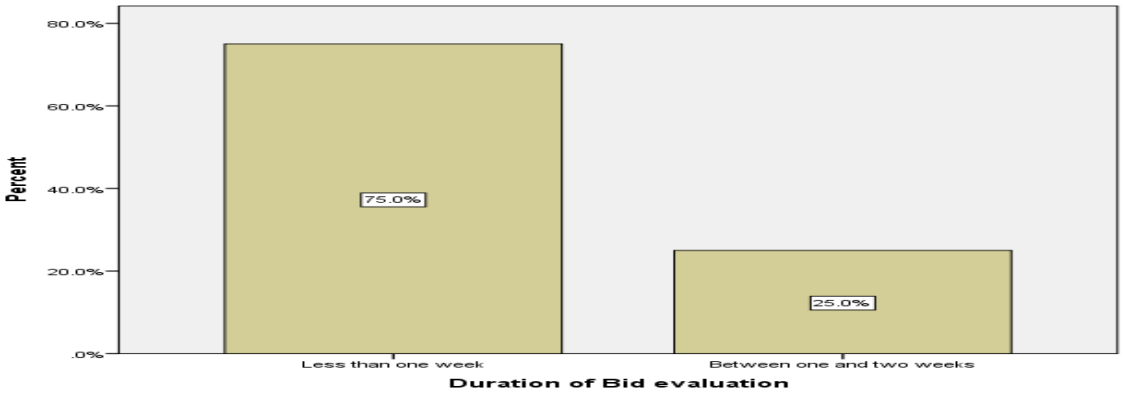


Figure 4.3: Time taken to evaluate tenders

Source: from field data

## 4.20 Preparation of Bid Evaluation Report

The credibility of the report writer in question is very necessary because if the report writer is not considered credible, the acceptance would be a problem. Figure 4.4 below shows how the bid Evaluation Reports are prepared and accepted. According to 61.76% of respondent's preparation of bid evaluation report is Bidding committees responsibility, 23.53% of respondents said; the bid Evaluation Report is written by the group of bid Evaluation team, & the remaining 14.71% Outweighs reports that are individually written (seven respondents) and the bid Review Board accepting.

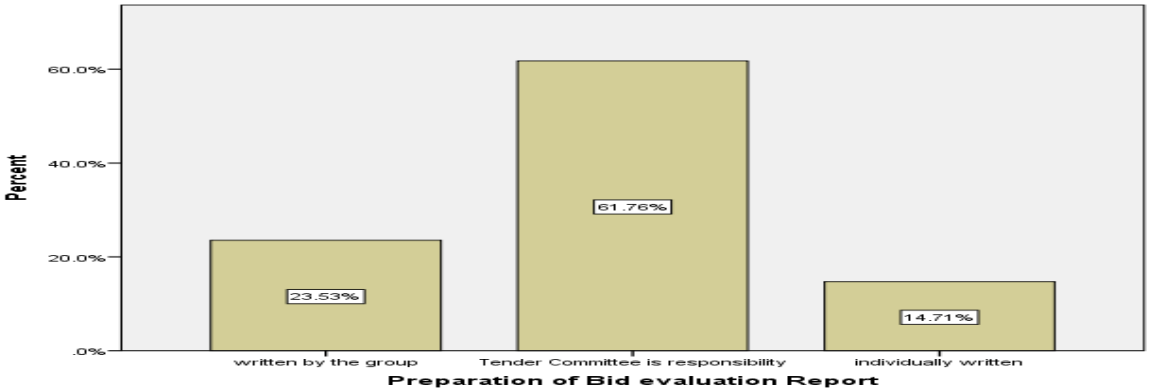


Figure 4.4: preparation of bid evaluation report

Source: from field data

## 4.21 RII of Contractor Selection Criteria

Table 4.20 demonstrated bidders' qualification criteria responded by the 34 respondent's client and consultant. Based on the results, the most top ten priorities in selecting bidders were Having a strong financial record, The criteria will help us to find "the best value bid ", Bidders must submit List of their subcontractor., The registration in Ethiopian construction industry, Effect of criteria on Project performance, Subjective criterions have effect on project quality, Technical, Financial, Resource, Management, Health and Safety are only Recommended criteria's, This company always checks bidders past project record, Bidders to have completed Similar size and type of project, Effect of Neglecting pre-qualification criteria. It is observed in this paper that the top four bidder's qualification criteria as agreed by the Ethiopian construction industry in Jimma city players are closely related to the "Project Management Triangle" of cost, schedule and quality, thus confirms that the bidders should not be merely selected based on the lowest cost offered alone [1].

## 4.22 Results and Discussion

Table 4.19. Summary result of descriptive analysis and Relative Importance Index (RII) of Contractor Selection Criteria

| CODE | INDICATOR | MEAN | RII | RANK |
|---|---|---|---|---|
| CQ1 | Effect of criteria on Project performance | 3.9412 | 0.78823 | 5 |
| CQ2 | Having Excess time for bid evaluation | 3.0000 | 0.6 | 33 |
| CQ3 | Having Sufficient time for bid evaluation | 3.3529 | 0.67058 | 23 |
| CQ4 | Having Short time for bid evaluation | 2.6176 | 0.54117 | 37 |
| CQ5 | Practice of mitigating problems | 3.4706 | 0.69411 | 20 |
| CQ6 | Effect of Previous bid evaluation on existing | 3.5882 | 0.71764 | 16 |
| CQ7 | Having an opportunity of training | 3.1176 | 0.62352 | 30 |
| CQ8 | Effect of Neglecting pre-qualification criteria | 3.7941 | 0.75882 | 10 |
| CQ9 | Subjectivity of Technical qualifications criterion | 3.6176 | 0.72352 | 15 |
| CQ10 | Subjectivity of Financial qualification criterion | 3.2647 | 0.65294 | 26 |
| CQ11 | Subjectivity of Management qualification criterion | 3.5294 | 0.70588 | 18 |
| CQ12 | Using Eng. estimation for Unreasonable least bidder | 3.4118 | 0.68235 | 21 |
| CQ13 | Minimum qualification criteria determine PPA | 3.6765 | 0.73529 | 13 |
| CQ14 | Controversial setting of minimum criteria Contractor registration by Ministry of Construction | 3.1765 | 0.63529 | 29 |

| | | | | |
|---|---|---|---|---|
| CQ15 | Under estimating of pre-qualification criteria | 3.5000 | 0.7 | 19 |
| CQ16 | Un assigns. Tech. capable personnel | 2.9706 | 0.59411 | 34 |
| CQ17 | Insufficient time allotting to bid evaluation | 3.0000 | 0.6 | 33 |
| CQ18 | Subjective criterions have effect on project quality | 3.9118 | 0.78235 | 6 |
| CQ19 | Incapability to know pre-qualification criteria | 3.5882 | 0.71764 | 16 |
| CQ20 | Bid evaluation team knowledge of criteria | 3.7942 | 0.75882 | 10 |
| BQ1 | Always carry out formal pre-qualification criteria | 3.7941 | 0.73529 | 13 |
| BQ2 | Using of Standard pre-qualification form | 3.7647 | 0.75294 | 11 |
| BQ3 | Formal pre-qualification not an important criteria | 2.2941 | 0.45882 | 40 |
| BQ4 | Not have the manpower to handle criteria | 2.5588 | 0.51176 | 38 |
| BQ5 | Company is willing to work with bidders no matter The outcome | 3.3529 | 0.60588 | 32 |
| BQ6 | The rally on criteria to source for qualified bidders | 3.5588 | 0.71176 | 17 |
| BQ7 | The criteria will help us to find “the best value bid “ | 4.0882 | 0.81764 | 2 |
| BQ8 | We believes that criteria is purely subjected analysis | 3.2059 | 0.64111 | 28 |
| BQ9 | As the final selection method dependent on bid sum | 3.0882 | 0.61764 | 31 |
| BQ10 | The criteria affect Project performance | 3.6471 | 0.72941 | 14 |
| BQ11 | Having a strong financial record | 3.2941 | 0.85882 | 1 |
| BQ12 | Having a good credit rating | 3.6176 | 0.72352 | 15 |
| BQ13 | Past turnover having equal or higher than this bid | 3.3824 | 0.67647 | 22 |
| TQ15 | Price is single most important criteria | 3.3824 | 0.74705 | 12 |
| TQ16 | Our company is always awarded of Lowest bidders | 3.3235 | 0.66470 | 24 |
| TQ17 | Our Company always compares Renderer prices | 3.2941 | 0.65882 | 25 |
| TQ18 | The company puts pressure on the bidders to lower bid price | 3.0294 | 0.60588 | 32 |
| TQ19 | My company bound to accept lowest tender bid | 3.2353 | 0.64705 | 27 |
| TEQ20 | The bidders must have a minimum of five years Business experience | 3.3235 | 0.66470 | 24 |
| TEQ21 | The registration in Ethiopian construction industry | 4.0000 | 0.8 | 4 |
| TEQ22 | Bidders to have completed Similar size and type of project | 3.8235 | 0.76470 | 9 |
| TEQ23 | This company always checks bidders past project record | 3.8235 | 0.77058 | 8 |
| TEQ24 | Bids summit quality control (QC) policy and audited work quality records | 3.7647 | 0.75294 | 11 |
| TEQ25 | Bidders must employed Quality management team | 3.7353 | 0.74705 | 12 |
| TEQ26 | The bidders the relevant IT knowledge, ACAD | 3.6471 | 0.72941 | 14 |

| | | | | |
|---|---|---|---|---|
| TEQ27 | Bidders must submit List of their subcontractor. | 3.5588 | 0.81176 | 3 |
| RQ28 | Price is the Single most important criteria | 3.1765 | 0.63529 | 29 |
| RQ29 | Criteria would not produce the result, final selection method is depend on Tender sum | 2.7059 | 0.54117 | 37 |
| RQ30 | Technical, Financial, Resource, Management, Health and Safety are only Recommended criteria's | 3.8824 | 0.77647 | 7 |
| RQ31 | Selecting lowest bidder by avoiding technical score | 2.8529 | 0.57058 | 36 |
| RQ32 | Formal pre-qualification is not important criteria | 2.5000 | 0.5 | 39 |
| RQ33 | Prequalification would not produce the result, it is always dependent on tender sum | 2.9412 | 0.58823 | 35 |
| RQ34 | Neglecting technical evaluation affect contractor Selection | 3.7353 | 0.74705 | 12 |

Note: Mean = Mean Value; RII = Relative Importance Index

Table 4.20. The Ten most frequently occurring and having higher degree of impact on the public bid evaluation rated by client side respondents are.

| | | **DEGREE OF IMPACT** | |
|---|---|---|---|
| **St. No** | **Qualification Criteria** | **RII** | **RANK** |
| 1 | Having a strong financial record | 0.85882 | 1 |
| 2 | The criteria will help us to find "the best value bid " | 0.81764 | 2 |
| 3 | Bidders must submit List of their subcontractor | 0.81176 | 3 |
| 4 | The registration in Ethiopian construction industry | 0.8 | 4 |
| 5 | Effect of criteria on Project performance | 0.788230 | 5 |
| 6 | Subjective criterions have effect on project quality | 0.78235 | 6 |
| 7 | Technical, Financial, Resource, Management, Health and Safety are only Recommended criteria's | 0.77647 | 7 |
| 8 | This company always checks bidders past project record | 0.77058 | 8 |
| 9 | Bidders to have completed Similar size and type of project | 0.76470 | 9 |
| 10 | Bid evaluation team knowledge of criteria | 0.75882 | 10 |

Respondents were asked what assessment of bid evaluation criteria they used for bidder's qualification. Regarding the process, 62.5% of the respondents use two-stage selection, 12.5 % of the respondents have assessments price, 12.5% of the respondents have negotiation, and 12.5% of the respondents have restricted bidding i.e. prequalification and final selection. There was a clear preference for using assessments of prices against a common one-stage or two-stage Bidding procedure [8]

The results are displayed in Fig 4.5

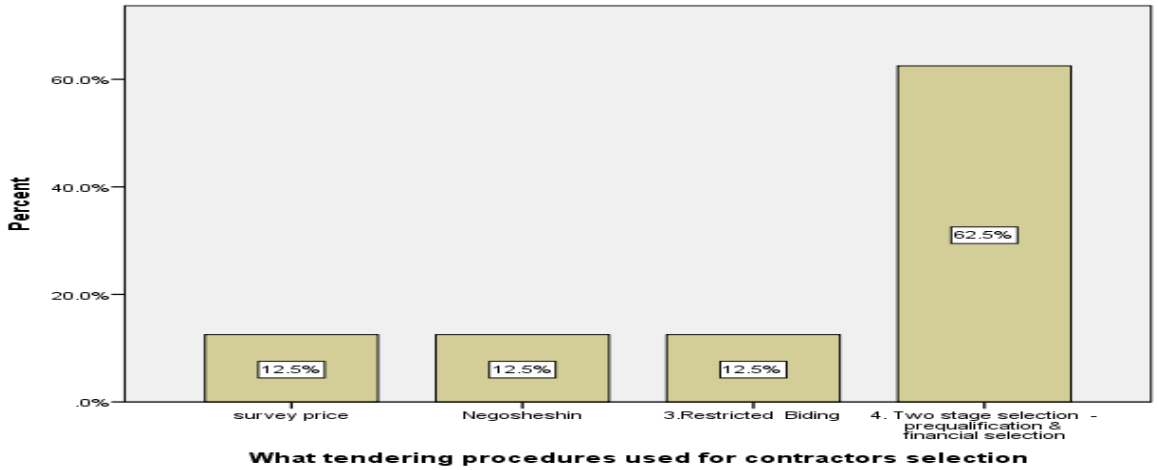


Figure 4.5: Procedure for contractor selection used by sampled enterprises

Source: from field data .

After analyzing the bidding goals, the respondents were asked how they determined bidders' qualification criteria. Attitude towards bidder's qualification criteria is presented in Fig4.6. There was a clear preference to determination of selection criteria depending on the project size, type and complexity, i.e. 75 % of the respondents determine selection criteria depending on by regulation of department, 12% follow by project type and complexity, and 12 % consider the by project size. It follows that the bidders have a wider knowledge and experience for bidder's selection than clients, and they do not make demands on related activity

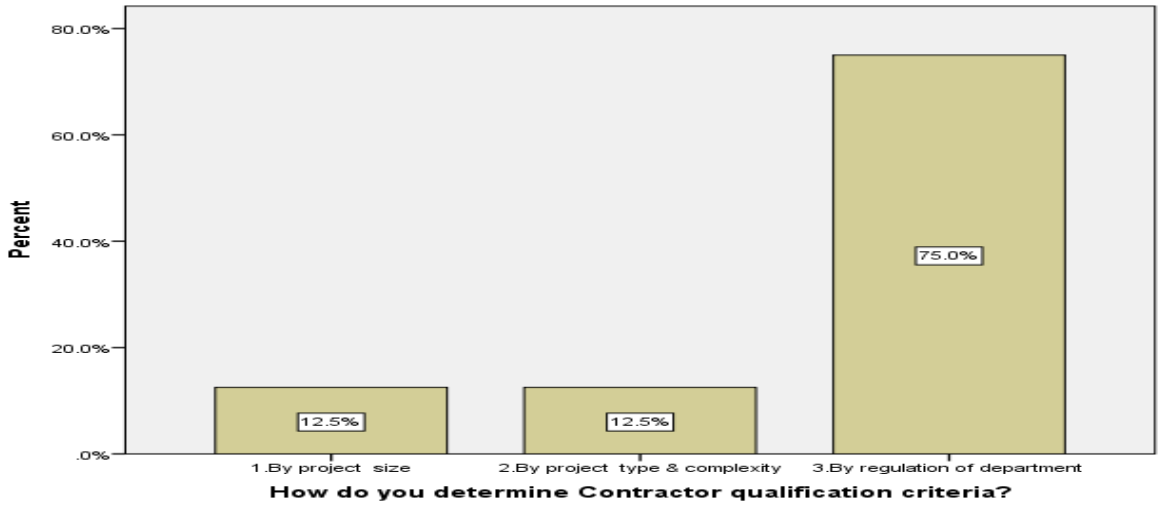


Figure 4.6: Bidding goals of sampled enterprises

Source: from field data

Fig 4.7 illustrates an official bidder's evaluation methodology is based on the bid utility and the lowest bid. However, the current practice of bidder's qualification evaluation in Jimma city can be regarded as the lowest bid approach [8]. Therefore, the respondents were asked to evaluate how important the bid price and other three types of bidder's evaluation qualification criteria, i.e. 'legal requirements', 'financial criteria' and 'technical and management criteria', were for them. The respondents assigned 62.5% points to 'bid price', 12.5% points – to 'legal requirements', 12.5% points – to 'financial criteria' and 12.5% points – to 'technical and management criteria.


Figure 4.7: Attitude towards selection criteria of sampled enterprises

Source: from field data

The respondents were asked to evaluate how important for them separate bidder's selection criteria were. Fig 4.8 shows rating of importance of the legal requirements of construction contractors. The respondents considered 'claims and contractual dispute' 50%, 'legal activity' 25%, 'failed contracts'12.5%, and bankruptcy possibility 12.5%, as important criteria.

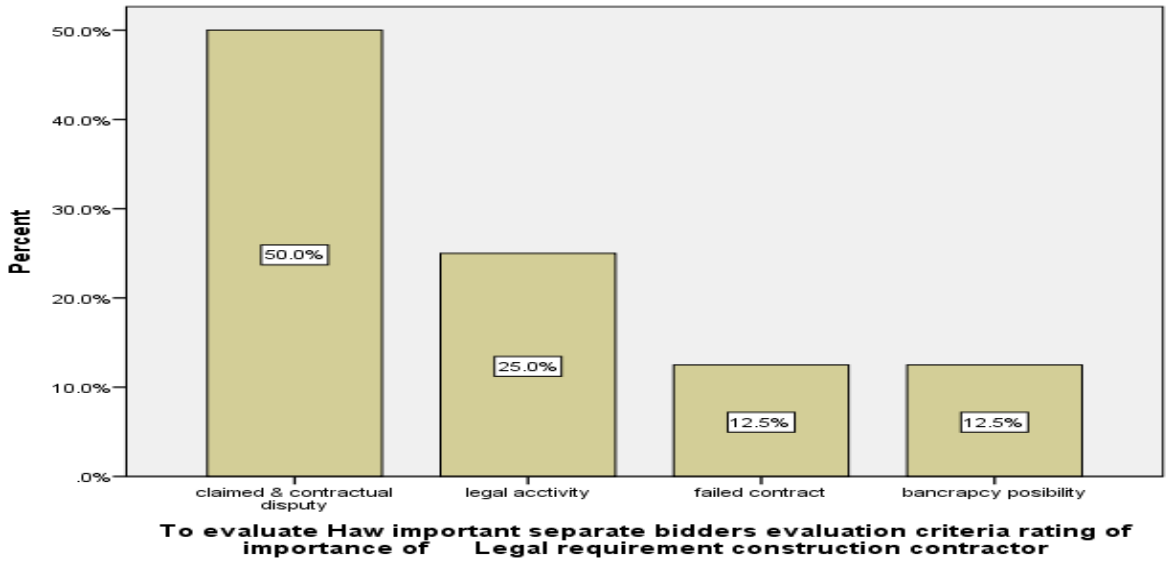


Figure 4.8: Ranking of legal requirements
Source: from field data

In order to calculate the relative weight of Client Side evaluation criteria, a list of criteria, which are the most important for respondents, was determined.

## 4.23 Client Side Respondents

Table 4.21. Client side Summary result of descriptive analysis and Relative Importance Index (RII) of Contractor Selection Criteria

| CODE | INDICATOR | MEAN | RII | RANK |
|---|---|---|---|---|
| CQ1 | Effect of criteria on Project performance | 3.9500 | 0.41 | 27 |
| CQ2 | Having Excess time for bid evaluation | 2.9500 | 0.61 | 13 |
| CQ3 | Having Sufficient time for bid evaluation | 3.4000 | 0.51 | 19 |
| CQ4 | Having Short time for bid evaluation | 2.5000 | 0.74 | 4 |
| CQ5 | Practice of mitigating problems | 3.4500 | 0.51 | 19 |
| CQ6 | Effect of Previous bid evaluation on existing | 3.7000 | 0.66 | 8 |
| CQ7 | Having an opportunity of training | 3.4000 | 0.5 | 21 |
| CQ8 | Effect of Neglecting pre-qualification criteria | 3.8000 | 0.64 | 10 |
| CQ9 | Subjectivity of Technical qualifications criterion | 3.6500 | 0.64 | 10 |
| CQ10 | Subjectivity of Financial qualification criterion | 3.1000 | 0.58 | 16 |
| CQ11 | Subjectivity of Management qualification criterion | 3.8000 | 0.64 | 10 |
| CQ12 | Using Eng. estimation for Unreasonable least bidder | 3.6000 | 0.66 | 8 |
| CQ13 | Minimum qualification criteria determine PPA | 3.7500 | 0.45 | 24 |

| | | | | |
|---|---|---|---|---|
| CQ14 | Controversial setting of minimum criteria Contractor registration by Ministry of Construction | 3.2500 | 0.55 | 18 |
| CQ15 | Under estimating of pre-qualification criteria | 3.6500 | 0.47 | 23 |
| CQ16 | Un assigns. Tech. capable personnel | 3.0500 | 0.59 | 15 |
| CQ17 | Insufficient time allotting to bid evaluation | 2.9000 | 0.62 | 12 |
| CQ18 | Subjective criterions have effect on project quality | 3.9000 | 0.42 | 26 |
| CQ19 | Incapability to know pre-qualification criteria | 3.6500 | 0,47 | 23 |
| CQ20 | Bid evaluation team knowledge of criteria | 3.7500 | 0.65 | 9 |
| BQ1 | Always carry out formal pre-qualification criteria | 3.8500 | 0.63 | 11 |
| BQ2 | Using of Standard pre-qualification form | 3.9000 | 0.62 | 12 |
| BQ3 | Formal pre-qualification not an important criteria | 2.1000 | 0.78 | 2 |
| BQ4 | Not have the manpower to handle criteria | 2.7000 | 0.66 | 8 |
| BQ5 | Company is willing to work with bidders no matter The outcome | 3.3500 | 0.78 | 2 |
| BQ6 | The rally on criteria to source for qualified bidders | 3.4500 | 0.71 | 5 |
| BQ7 | The criteria will help us to find “the best value bid “ | 4.1000 | 0.38 | 28 |
| BQ8 | We believes that criteria is purely subjected analysis | 2.7500 | 0.68 | 7 |
| BQ9 | As the final selection method dependent on bid sum | 3.0500 | 0.59 | 15 |
| BQ10 | The criteria affect Project performance | 3.6000 | 0.48 | 22 |
| BQ11 | Having a strong financial record | 3.3500 | 0.53 | 20 |
| BQ12 | Having a good credit rating | 3.5000 | 0.5 | 21 |
| BQ13 | History of having equal or higher Past turnover than this bid | 3.3000 | 0.54 | 19 |
| TQ15 | Price is single most important criteria | 3.3000 | 0.54 | 19 |
| TQ16 | Our company is always awarded of Lowest bidders | 3.4500 | 0.51 | 19 |
| TQ17 | Our Company always compares Renderer prices | 3.4500 | 0.51 | 19 |
| TQ18 | The company puts pressure on the bidders to lower bid price | 3.0500 | 0.59 | 15 |
| TQ19 | We puts pressure on the bidders to Lowest bid | 3.3000 | 0.54 | 19 |
| TEQ20 | The bidders must have a minimum of five years Business experience | 3.5000 | 0.5 | 21 |
| TEQ21 | The registration in Ethiopian construction industry | 3.8000 | 0.44 | 25 |
| TEQ22 | Bidders to have completed Similar size and type of project | 3.6500 | 0.47 | 23 |
| TEQ23 | This company always checks bidders past project record | 3.6500 | 0.66 | 8 |
| TEQ24 | The bidders summit their quality control (QC) policy and audited work quality records | 3.7500 | 0.85 | 1 |
| TEQ25 | Bidders must employed Quality management team | 3.6000 | 0.48 | 22 |
| TEQ26 | *The bidders the relevant IT* knowledge *and ACAD* | 3.5000 | 0.5 | 21 |

| | | | | |
|---|---|---|---|---|
| TEQ27 | Bidders must submit List of their subcontractor. | 3.5000 | 0.6 | 14 |
| RQ28 | Price is the Single most important criteria | 3.2000 | 0.56 | 17 |
| RQ29 | Criteria would not produce the result, final selection method is depend on Tender sum | 2.5500 | 0.69 | 6 |
| RQ30 | Technical, Financial, Resource, Management, Health and Safety are only Recommended criteria's | 3.8000 | 0.44 | 25 |
| RQ31 | Selecting lowest bidder by avoiding technical score | 2.7000 | 0.66 | 8 |
| RQ32 | Formal pre-qualification is not important criteria | 2.2500 | 0.75 | 3 |
| RQ33 | Prequalification would not produce the result, it is always dependent on tender sum | 2.8500 | 0.63 | 11 |
| RQ34 | Neglecting technical evaluation affect contractor Selection | 3.7500 | 0.45 | 24 |

Note: Mean = Mean Value; RII = Relative Importance Index

On the other hand, the last top ten criteria were found to be Bids summit quality control (QC) policy and audited work quality records, Company is willing to work with bidders no matter The outcome, Formal pre-qualification only is not important criteria, Having Short time for bid evaluation, The rally on criteria to source for qualified bidders, Criteria would not produce the result, final selection method is depend on Tender sum, We believes that criteria is purely subjected analysis, Selecting lowest bidder by avoiding technical score, Bid evaluation team knowledge of criteria, Effect of Neglecting pre-qualification criteria. The quality management system is agreed to be the least agreed bidder's selection criteria based on the fact that quality management system is implemented at a moderate level within the Ethiopian construction industry as claimed by Besides, technical manpower is also agreed as least important because most of the contractors outsource its works to sub-contractors thus a shortage of technical manpower is not an issue [1]

Table 4.22. The Ten most frequently occurring and having higher degree of impact on the public bid evaluation rated by client side respondents are.

| ST.NO | QUALIFICATION CRITERIA | DEGREE OF IMPACT | |
|---|---|---|---|
| | | RII | RANK |
| 1 | Bids summit quality control (QC) policy and audited work quality records | 0.85 | 1 |
| 2 | Company is willing to work with bidders no matter The outcome | 0.78 | 2 |
| 3 | Formal pre-qualification only is not important criteria | 0.75 | 3 |
| 4 | Having Short time for bid evaluation | 0.74 | 4 |
| 5 | The rally on criteria to source for qualified bidders | 0.71 | 5 |
| 6 | Criteria would not produce the result, final selection method is depend on Tender sum | 0.69 | 6 |
| 7 | We believes that criteria is purely subjected analysis | 0.68 | 7 |
| 8 | Selecting lowest bidder by avoiding technical score | 0.66 | 8 |
| 9 | Bid evaluation team knowledge of criteria | 0.65 | 9 |
| 10 | Effect of Neglecting pre-qualification criteria | 0.64 | 10 |

## 4.24 Consultant Side Respondents

Table 4.23. Consultant side Summary result of descriptive analysis and Relative Importance Index (RII) of Contractor Selection Criteria

| CODE | INDICATOR | MEAN | RII | RANK |
|---|---|---|---|---|
| CQ1 | Effect of criteria on Project performance | 3.9286 | 0.43 | 16 |
| CQ2 | Having Excess time for bid evaluation | 3.0714 | 0.41 | 18 |
| CQ3 | Having Sufficient time for bid evaluation | 3.2857 | 0.38 | 21 |
| CQ4 | Having Short time for bid evaluation | 2.7857 | 0.45 | 14 |
| CQ5 | Practice of mitigating problems | 3.5000 | 0.49 | 10 |
| CQ6 | Effect of Previous bid evaluation on existing | 3.4286 | 0.5 | 9 |
| CQ7 | Having an opportunity of training | 2.7143 | 0.46 | 13 |
| CQ8 | Effect of Neglecting pre-qualification criteria | 3.7857 | 0.31 | 22 |
| CQ9 | Subjectivity of Technical qualifications criterion | 3.5714 | 0.47 | 12 |
| CQ10 | Subjectivity of Financial qualification criterion | 3.5000 | 0.35 | 22 |
| CQ11 | Subjectivity of Management qualification criterion | 3.1429 | 0.4 | 19 |
| CQ12 | Using Eng. estimation for Unreasonable least bidder | 3.1429 | 0.4 | 19 |
| CQ13 | Minimum qualification criteria determine PPA | 3.5714 | 0.47 | 12 |
| CQ14 | Controversial setting of minimum criteria Contractor registration by Ministry of Construction | 3.0714 | 0.41 | 18 |

| | | | | |
|---|---|---|---|---|
| CQ15 | Under estimating of pre-qualification criteria | 3.2857 | 0.52 | 7 |
| CQ16 | Less assignment. Tech. capable personnel | 2.8571 | 0.6 | 2 |
| CQ17 | Insufficient time allotting to bid evaluation | 3.1429 | 0.4 | 19 |
| CQ18 | Subjective criterions have effect on project quality | 3.9286 | 0.43 | 16 |
| CQ19 | Incapability to know pre-qualification criteria | 3.5000 | 0.49 | 10 |
| CQ20 | Bid evaluation team knowledge of criteria | 3.8571 | 0.44 | 15 |
| BQ1 | Always carry out formal pre-qualification criteria | 3.7143 | 0.44 | 15 |
| BQ2 | Using of Standard pre-qualification form | 3.5714 | 0.45 | 14 |
| BQ3 | Formal pre-qualification not an important criteria | 2.5714 | 0.48 | 11 |
| BQ4 | Not have the manpower to handle criteria | 2.3571 | 0.51 | 8 |
| BQ5 | Company is willing to work with bidders no matter the outcome | 3.3571 | 0.51 | 8 |
| BQ6 | The rally on criteria to source for qualified bidders | 3.7143 | 0.46 | 13 |
| BQ7 | The criteria will help us to find “the best value bid “ | 4.0714 | 0.4 | 19 |
| BQ8 | We believes that criteria is purely subjected analysis | 3.8571 | 0.42 | 17 |
| BQ9 | As the final selection method dependent on bid sum | 3.1429 | 0.4 | 19 |
| BQ10 | The criteria affect Project performance | 3.7143 | 0.46 | 13 |
| BQ11 | Having a strong financial record | 3.2143 | 0.39 | 20 |
| BQ12 | Having a good credit rating | 3.7857 | 0.44 | 15 |
| BQ13 | Having history of equal or higher Past turnover | 3.5000 | 0.48 | 11 |
| TQ15 | Price is single most important criteria | 3.5000 | 0.48 | 11 |
| TQ16 | Our company is always awarded of Lowest bidders | 3.1429 | 0.51 | 8 |
| TQ17 | Our Company always compares Renderer prices | 3.0714 | 0.41 | 18 |
| TQ18 | The company puts pressure on the bidders to lower price | 3.0000 | 0.41 | 18 |
| TQ19 | My company bound to accept lowest tender bid | 3.1429 | 0.4 | 19 |
| TEQ20 | The bidders must at list five years Business experience | 3.0714 | 0.41 | 18 |
| TEQ21 | The registration in Ethiopian construction industry | 4.2857 | 0.38 | 21 |
| TEQ22 | Bidders to have completed Similar size and type of project | 4.0714 | 0.54 | 6 |
| TEQ23 | This company always checks bidders past project record | 4.0714 | 0.55 | 5 |
| TEQ24 | Bids summit quality control (QC) policy and audited work quality records | 3.7857 | 0.48 | 11 |
| TEQ25 | Bidders must employed Quality management team | 3.9286 | 0.57 | 4 |
| TEQ26 | The bidders the relevant IT knowledge, ACAD, | 3.8571 | 0.44 | 15 |
| TEQ27 | Bidders must submit List of their subcontractor. | 3.6429 | 0.61 | 1 |
| RQ28 | Price is the Single most important criteria | 3.1429 | 0.4 | 19 |
| RQ29 | Criteria would not produce the result, final selection method is depend on Tender sum | 2.9286 | 0.43 | 16 |
| RQ30 | Technical, Financial, Resource, Management, Health and Safety are only Recommended criteria’s | 4.0000 | 0.41 | 18 |
| RQ31 | Selecting lowest bidder by avoiding technical score | 3.0714 | 0.55 | 5 |
| RQ32 | Formal criteria is not important on selectin process | 2.8571 | 0.58 | 3 |

| | | | | |
|---|---|---|---|---|
| RQ33 | Prequalification would not produce the result, it is always dependent on tender sum | 3.0714 | 0.55 | 5 |
| RQ34 | Neglecting technical evaluation affect contractor Selection | 3.7143 | 0.46 | 13 |

Note: Mean = Mean Value; RII = Relative Importance Index

On the other hand, the last top ten criteria were found to be Bidders must submit List of their subcontractor, Less assignment of Technical capable personnel have effect, Formal criteria only is not important on selectin process, Bidders must employed Quality management team, Selecting lowest bidder by avoiding technical score, Bidders to have completed Similar size and type of project, Under estimating of pre-qualification criteria, Not have the manpower to handle criteria, Effect of Previous bid evaluation on existing, Incapability to know pre-qualification criteria. The quality management system is agreed to be the least agreed bidder's selection criteria based on the fact that quality management system is implemented at a moderate level within the Ethiopian construction industry as claimed by besides, technical manpower is also agreed as least.

Table 4.24. The Ten most frequently occurring criteria with client and consultant side respondents

| ST.NO | IDENTIFIED CRITERIA'S | DEGREE OF IMPACT | |
|---|---|---|---|
| | | RII | RANK |
| 1 | Bidders must submit List of their subcontractor | 0.61 | 1 |
| 2 | Less assignment of Technical capable personnel have effect | 0.60 | 2 |
| 3 | Formal criteria only is not important on selectin process | 0.58 | 3 |
| 4 | Bidders must employed Quality management team | 0.57 | 4 |
| 5 | Selecting lowest bidder by avoiding technical score | 0.55 | 5 |
| 6 | Bidders to have completed Similar size and type of project | 0.54 | 6 |
| 7 | Under estimating of pre-qualification criteria | 0.52 | 7 |
| 8 | Not have the manpower to handle criteria | 0.51 | 8 |
| 9 | Effect of Previous bid evaluation on existing | 0.50 | 9 |
| 10 | Incapability to know pre-qualification criteria | 0.49 | 10 |

- The above findings showed that Bidders must submit List of their subcontractor, Less assigns. Tech. capable personnel, Formal criteria only is not important on selectin process, Bidders must have employed Quality management team, selecting lowest bidder by avoiding technical score, as well as Bidders to have completed Similar size and type of project are the

most influential technical qualification criteria that should be done during the pre-bid preparation work but their gap influence the bid process as well as their effect extend during the project execution time. Their effect has been manifested as excessive delay, variations more than the allowable limit. On completed project, significantly shown by un integrated service and functional requirement on operating building facilities.

- Our company is always awarded of Lowest bidders, selecting lowest bidder by avoiding technical score, Formal criteria is not important on selectin process, Prequalification would not produce the result, it is always dependent on tender sum, are the most influential financial qualification criteria that are related to bid document preparation as well as capacity and attitude related problems on the bid evaluation team. These problems are observed on many public projects bid evaluation process.

# CHAPTER- FIVE

# CONCLUSIONS AND RECOMMENDATIONS

## 5.1. Conclusions

This study has been conducted to identify main and influential factors which hinder the bid evaluation process as well as affecting appropriate contractor selection in public building construction projects in Jimma city. A number of literatures had been reviewed; desk study of selected projects bid evaluation process reviewed and a questioner survey were conducted to identify bid evaluation process factors of public building construction projects in Jimma city.

•The study shows that absence of minimum bid evaluation technical criterion and sub criterions in the procurement manual has lead the public procurement units to exercise different scope of requirements for similar projects. Selecting lowest bidder by avoiding technical score has become the fifth most influential problem on the current bid evaluation and contractor selection process public building projects.

• Formal pre-qualification not an important criterion, not have the manpower to handle criteria have been given lower attention by clients and consultants during the pre-bid preparation time and these have become major technical gap on the current non-residential public building procurement process.

• Effect of criteria on Project performance, Having Excess time for bid evaluation, Having Sufficient time for bid evaluation, in client and The bidders summit their quality control (QC) policy and audited work quality records, Company is willing to work with bidders no matter The outcome, Formal pre-qualification only is not important criteria in consultant are the most influential factor.

•There is no equilibrium between equipment and machinery required for contractor's license registration by ministry of construction and to that of particular project tender requirements for the given class contractor.

•Absence of minimum financially offer threshold on the public procurement regulation, projects are awarded to abnormally low offer on least offer bases and apparently those projects are suffering financial and quality problems.

## 5.2 Recommendations

The following recommendations that were derived from combined results of literature, tender material and the survey:

• In order to achieve the aims of a construction project, qualified and potential construction bidders must be selected for execution of construction works. Thus, their qualification must be evaluated by determining and defining appropriate evaluation criteria.

• Evaluation qualification criteria for bids of bidders must be selected considering the size and complexity of a construction project.

• Multi-bidder's qualification criteria evaluation methods may be used in evaluation of bidder's bids and the weight of bidder's qualification criteria is determined considering the priorities of a client (the lowest price, the shortest implementation period, experience in similar projects, etc.).

• Currently, bid price is the most important qualification criterion in the selection of bidders both in Jimma city of public building construction project. Although bid conditions list many other evaluation criteria, clients tend to select bidders with the lowest bid price. Bidders should not be selected according to the lowest price, but it should be attributed to the highest weight.

• There should be two stages in the process of evaluation of bidders: (1) determination of qualification of bidders, i.e. whether a bidder meets minimum requirements of project implementation, and (2) evaluation of selected bidders of construction project.

• Further study should be conducted to advance the bid evaluation and contractor selection process

# REFERENCE

[1] Izwan Rashid1, Syuhaida Ismail2, Zainai Mohamed3, Abd. Lati f Saleh4, Contractor Selection Criteria, a Study on Malaysian Public Construction Projects, International Journal of Engineering and Technology, 7 (3.25) (2018) 65-70

[2] A.H. Afolayan, B. A. Ojokoh, S. A. Adeyinka, Evaluation of Prequalification Decision Criteria, for Selecting Contractors in Nigeria using Analytic Hierarchy Process, International Journal of Computer Applications (0975 – 8887) Volume 179 – No.22, February 2018

[3] Mohammed Al-otaibi1 and a.d.f. price, analysis and evaluation of criteria for pre-selecting contractors in the saudiarabian construction sector, association of researcher's in construction management, vol. 2, pp.11411148.

[4] Syuhaida Ismail, Mohammad HussainiWahab, ssions, Contractor's Performance for Construction Project: A Review, M.R. Lee et al Int. Journal of Engineering Research and Applications 9622, Vol. 4, Issue 4(Version 7), April 2014, pp.131-137

[5] HelgiÞórIngason, Ph.D., Professor at School of Science, A review of contractor selection methods in Iceland, Master of Science (M.Sc.) in Engineering Management December 2016

[6] Martin Skitmore, Criteria for contractor selection Article in Construction Management and Economics · January 1997

[7] OrkunAlptekin and NesrinAlptekin, Analysis of Criteria Influencing Contractor Selection Using TOPSIS Method, IOP Conference Series: Materials Science and Engineering, 2017 IOPConf. Ser.: Mater. Sci. Eng. 245 062003

[8] NerijaBanaitiene and AudriusBanaitis, Analysis of criteria for Contractors' qualification evaluation, Technological and Economic Development of Economy, 2006, Vole XII, No 4, 276–282

[9] m. salama1, h. abd el aziz2, h. el sawah3 and a. el samadony3, investigating the criteria for contractors' selection and bid evaluation in Egypt,A (2006)

[10].baynesagnasfawu, performance based contracting in Public procurement of developing countries -November 2017 at 12:45

[11] J. R. San Cristóbal, "Contractor Selection Using Multicriteria Decision-Making Methods," J. Constr. Eng. Manag., vol. 138, no. 6, pp. 751–758, 2012.

[12] M. S. El-abbasy, T. Zayed, M. Asce, M. Ahmed, H. Alzraiee, and M. Abouhamad, "Contractor Selection Model for Highway Projects Using Integrated Simulation and Analytic Network Process," J. Constr. Eng. Manag., vol. 139, no. 7, pp. 755–767, 2013.

[13] A. Khan, M. S. Lodhi, M. I. Qureshi, I. Naseem, Y. Javed, and K. Zaman, "Management of project changes in construction companies: Case of Pakistan," World Appl. Sci. J., 2014

[13] D. Puri and S. Tiwari, "Evaluating The Criteria f or Contractors ‟ Selection and Bid Evaluation," Int. J. Eng. Sci. Invent., vol. 3, no. 7, pp. 44–48, 2014.

[14] N.Ibadov, "Contractor selection for construction project, with the use of fuzzy preference relation," Procedia Eng., vol. 111, pp. 317– 323, 2015.

[15] H.Hosseini Nasab and M. Mirghani Ghamsarian, "A fuzzy multiple-criteria decision-making model for contractor prequalification," J. Decis. Syst., vol. 24, no. 4, pp. 433–448, 2015.

[16] A. Idrus, M. Sodangi, and M. A. Amran, "Decision criteria for selecting main contractors in Malaysia," Res. J. Appl. Sci. Eng. Technol., vol. 3, no. 12, pp. 1358–1365, 2011.

[17] D. J. Watt, B. Kayis, and K. Willey, "The relative importance of tender evaluation and contractor selection criteria," Int. J. Proj. Manag., vol. 28, no. 1, pp. 51–60, 2010.

[18] M. Balubaid and R. Alamoudi, "Application of the Analytical Hierarchy Process (AHP) to Multi-Criteria Analysis for Contractor Selection," Am. J. Ind. Bus. Manag., vol. 5, pp. 581–589, 2015.

[19] R. H. Alias, N. M. M. Noor, M. Y. M. Saman, M. L. Abdullah, and A. Selamat, "Contractor selection using fuzzy comparison judgment," in 2011 5th Malaysian Conference in Software Engineering, My SEC 2011, 2011, pp. 388–392

[12] A. Movahedian Attar, M. Khanzadi, S. Doberman, and E. Kalhor, "Forecasting contractor's deviation from the client objectives in prequalification model using support vector regression," Int. J. Proj. Manag., vol. 31, no. 6, pp. 924–936, 2013.

[13] J. R. San Cristóbal, "Contractor Selection Using Multicriteria Decision-Making Methods," J. Constr. Eng. Manag., vol. 138, no. 6, pp. 751–758, 2012.

[14] L. Liu, Y. Zhou, and H. Zhu, "A conceptual framework for vendor selection based on supply chain risk management from a literature," J. Syst. Manag. Sci., vol. 1, no. 3, pp. 1–8, 2011.

[15] R. A. Khan, "Role of Construction Sector in Economic Growth: Empirical Evidence from Pa," Adv. Integrating Constr. Dev. Countries, pp. 279–290, 2008.

[16] G. Ofori, "Nature of the Construction Industry, Its Needs and Its Development: A Review of Four Decades of Research," vol. 20, no. 2, pp. 115–135, 2015.

[17] B. R. Sarker, P. J. Egbelu, T. W. Liao, and J. Yu, "Planning and design models for construction industry: A critical survey," Autom. Constr., vol. 22, pp. 123–134, 2012.

[18] L. Crawford, J. Pollack, and D. England, "Uncovering the trends in project management: Journal emphases over the last 10 years," Int. J. Proj. Manag., vol. 24, no. 2, pp. 175–184, 2006.

[19] Project Management Institute, A guide to the project management body of knowledge (PMBOK ® guide). 2013.

[20] Association for Project Management, Association for Project Management Body of Knowledge, vol. 6th Editio. 2012.

[21] Project Management Institute, Construction Extension to the PMBOK Guide. 2016.

[22] M. S. El-abbasy, T. Zayed, M. Asce, M. Ahmed, H. Alzraiee, and M. Abouhamad, "Contractor Selection Model for Highway Projects Using Integrated Simulation and Analytic Network Process," J. Constr. Eng. Manag., vol. 139, no. 7, pp. 755–767, 2013.

[23] A. Khan, M. S. Lodhi, M. I. Qureshi, I. Naseem, Y. Javed, and K. Zaman, "Management of project changes in construction companies: Case of Pakistan," World Appl. Sci. J., 2014.

[24] Abinet dametachew alemu "assessment of contractors' qualification criteria in Ethiopia federal road project tender practices"October, 2015

[25] D. Puri and S. Tiwari, "Evaluating The Criteria f or Contractors " Selection and Bid Evaluation," Int. J. Eng. Sci. Invent., vol. 3, no. 7, pp. 44–48, 2014.

[26] Victor Boateng, (BBA Accounting), "an examination of tender evaluation practices in Metropolitan, municipal and district assemblies in ashanti region " June, 2014

[27] P. Jaskowski, S. Biruk, and R. Bucon, "Assessing contractor selection criteria weights with fuzzy AHP method application in group decision environment," Autom. Constr., vol. 19, no. 2, pp. 120–126, 2010.

[28] Binyam Letarge, Emer T. Quezon, Yolente C. Macarubbo "Evaluation on the Performance of Lowest Responsive Bid Contract and the Quality of Materials Used on Governmental Building Projects in Jimma Town" Volume 7, Issue 12, December-2016 60 ISSN 2229-5518

[29].Hughes, M. (2005). Evaluation of the Local Government Procurement Agenda - Baseline Survey Report. The Office of the Deputy Prime Minister, London. [On-line]. Available at

[30](http://www.academia.edu/2606912/The_Influence_of_The_Public_Procurement_Act_2003_Act663_on_Project_Time_Performance_of_Construction_Projects_In_Ghana, (Accessed 2013July 21)

[31](Wittig, 1999). Building value through Procurement: A focus on Africa. Paper Presented to the 9th International Anti-Corrupting Conference, Durbar,SouthAfrica.http://iacconference.org/documents/9th_iacc_workshop_Building_Value_through_Public_Procurement.doc (Accessed 2013 July 1)

[32]Uganda 2006, Local Government Regulation of Uganda (2006). Available (http://www.ppda.go.ug/dmdocuments/Local_Gorvernment_regulations% 202006.pdf). (Accessed 2013 September 30)

[33](National Treasury of South Africa, 2011) http://pdf.ebooks6.com/THE-NATIONAL-TREASURY-Republic-of South-Africa-pdf-e40593.html) [Accessed on: July 28, 2013)

[34]Authority (Procurement Regulation of Zambia, 2011). (www.ppa.org.zm-…php-file=procurementregulations.pdf). (Accessed 2013 August 29)

[35] However, In Ghana, the Public Procurement Act 663, (2003) Public Procurement Act, (2003). Public Procurement Act of Ghana

[36] (PPA, 2003). Procedures Manual of Nigeria and the Public Procurement Act 663(2003) of Ghana

[37] The Public Procurement Act 663(2003) Public Procurement Act, (2003). Public Procurement Act of Ghana

[38]According to PPDA2007(http://www.ppda.go.ug/dmdocuments/2ndRevisedCorporatePlan2006200final.pdf). (Assessed 2013 September 23)

[39] Bamfo et al (2013) Bamfo-Agyei, E., Nani, G. And Hackman, J.K. (2013) Assessment of the Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Nkum, R.K., Nani, G., Atepor, L., Oppon, R.A. Aware, E. and Bamfo-Agyei, E. (Eds) Procs 2nd Applied Research Conference in Africa. (ARCA) Conference, 8-10 August 2013Kumasi, Ghana. 236-249

[40] According to the Procurement Procedures Manual of Nigeria (2011),(http://www.library.procurementmonitor.org/files/PROCUREMENT%20PROCEDURES%20MANUAL.pdf). (Assessed 2013 September 20)

[41] Zedan H., Martin S. (1998) Building and Environment. Vol. 33, No 2-3, pp. 105 115, Published by Elsewer Science Ltd.

[42] (Scotish Government, 2008). Scotish Government.Tendering for Public Contracts; Procurement Reform Programme Scotland (2008). www. Scotland .gov .uk /procurement, (Accessed on 2013 September 2)

[43] Zedan H., Martin S. (1998) Building and Environment. Vol. 33, No 2-3, pp. 105 115, Published by Elsewer Science Ltd.

[44] Gildenhuys, J.S.H. (2002). Public financial management. Pretoria: Van Schaik

[45] Ngobeni, S. A. (2011). An analysis of the tender process in national government in South Africa (Doctoral dissertation)

[46] (UN, 2011). United Nations (2011) UN Procurement Practitioners Handbook. [online] Available at: http://www.unops.org/SiteCollectionDocuments/EB%20documents/2012/Second%20regular%20session%202012/2011_supplement_transparency. p

[47] Public Procurement Act, (2003). Public Procurement Act of Ghana

[48] (Public Procurement Act 663, 2003 Public Procurement Act, (2003). Public Procurement Act of Ghana

[49] Procurement Act (PPA) of Ghana (Act 663, 2003), Public Procurement Act, (2003). Public Procurement Act of Ghana

[50] Public Procurement Act, (2003). Public Procurement Act of Ghana

[51] Nigeria Bureau of Public Procurement (2011). Procurement Manual for Nigeria http://library.procurementmonitor.org/files/PROCUREMENT%20PROCEDURES%20MANUAL.pdf, (Accessed 2013 September 5)

[52] (Akortsu, 2012). Akortsu, W. (2012) How should health and safety be measured as a tender evaluation criterion in the Ghanaian construction industry? In: Laryea, S., Leiringer, R. and Hughes, W. (Eds) Procs West Africa Built Environment Research (WABER) Conference, 19-21 July 2011, Accra, Ghana, 571-583

[53] Board of the Public Procurement Act 663, 2003 Public Procurement Act, (2003). Public Procurement Act of Ghana

[54] Nigeria Bureau of Public Procurement (2011). Procurement Manual for Nigeria

http://library.procurementmonitor.org/files/PROCUREMENT%20PROCE DURES%20MANUAL.pdf, (Accessed 2013 September 5)

[55] (PPA 2003) Public Procurement Act, (2003). Public Procurement Act of Ghana

[56] (Public Procurement Act 663, 2003) Public Procurement Act, (2003). Public Procurement Act of Ghana

[57] Acquaye, J.A (2011), Guide to Practice of Procedures in Public Procurement of Works. ISBN 978-998-1-5015-0. pp. 61-68.

[58] According to PPA 2003, Republic of Ghana (2006). Public Procurement Authority. "Procurement of Goods."Public Procurement Act, 2003 (Act 663). Accra: Public Procurement Board, 2006. Chapter 4. PDF file

[59] Akortsu (2011) Akortsu, W. (2011) How should health and safety be measured as a tender evaluation criterion in the Ghanaian construction industry? In: Laryea, S. Leiringer, R. and Hughes, W. (Eds) Procs West Africa Built Environment Research (WABER) Conference, 19-21 July 2011, Accra, Ghana, 571-583

[60] According to Ang et al (2005), Ang, G.; Groosman, M.; Scholten, N. P. M. (2005). Dutch performance-based approach to building regulations and public procurement. Business Research & Information, Vol. 33, Issue 2, p. 107–119

[61] (Koushki, 2005) Koushki, P. A.; Al-Rashid, K.; Kartam, N. Delays and cost increases in the construction of private residential projects in Kuwait. Construction Management and Economics, Vol. 23, Issue 3, 2005, p. 285–294.

[62] (Banaitiene and Banaitis, 2006) Banaitiene N. and Banaitis A., (2006) Analysis of criteria for contractors‟ qualification evaluation, Technological and Economic Development of Economy, 12:4, 276-282 http://dx.doi.org/10.1080/13928619.2006.9637754, (Accessed 2013 August 3)

[63] Westring (1997) Westring, G. (1997) Ghana Public Procurement Reform. An Audit Report prepared for the World Bank, Stockholm: Advokatfirman Cederquist KB

[64] Moshiro,(2011), Assessment of supplier evaluation matrix in Tanzania national parks, 1st edition personal research paper, Mzumbe University- MorogoroTz. [Online]. Available at:(http://www.scribd.com/doc/57290198/SUPPLIER-EVALUATI MATRIX). [Accessed on: July 20, 2013)

[65] Public Life (2003) Proceedings of the National Conference for Cleaner Public Life (2003). Edited by László Keller and Petter Langseth and Published by the United Nations Office on Drugs and Crime.

[66] (Habtermicheal, 2009). Habtermicheal F., (2009). Anti-Corruption strategies in the South African Public Sector- Perspective on the contribution of complexity thinking and ICT.PhD thesis, Stellenbosch University, South Africa. (http://scholar.sun.ac.za/handle/10019.1/1397). (Accessed on, 2013 August 29)

[67] According to Ameyaw et al (2013), Ameyaw, C. Mensah, S. and Osei-Tutu, E. (2013) Curbing Corruption in Public Procurement Process in Ghana: Public Policy and Administration Research ISSN 2224- 0972 (online) Vol.3, No.5, 2013

[68] Bamfo et al (2013), Bamfo-Agyei, E., Nani, G. And Hackman, J.K. (2013) Assessment of the Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Nkum, R.K., Nani, G., Atepor, L., Oppon, R.A. Aware, E.andBamfo-Agyei, E. (Eds) Procs 2nd Applied Research Conference in Africa. (ARCA) Conference, 8-10 August 2013, Kumasi, Ghana. 236-249

# APPENDIX

## QUESTIONNAIRE

The main questionnaire consists of three Part. The first part gathers respondents‟ personal information, the second part investigates stakeholders‟ perception on the effectiveness of current bidder's qualification criteria evaluation system for public building construction projects in Jimma city and the last part examines critical part of interview questions bidder's qualification criteria for evaluating bidders in public building construction projects in Jimma city. For this paper, only selected parts of the questionnaire related to the topic are discussed. The questionnaire survey was designed to apprehend the respondents‟ responses, where respondents were given with a statement, and then they were requested to provide their replies with variable degrees of strongly dis agree, dis agree, neither agree/dis agree, agree, and strangely agree Scales. Respondents attitudes are measured using the strongly dis agree, dis agree, neither agree/dis agree, agree, strangely agree5points Liker scale ranging from "1" (strongly disagreed) to "5" (strongly agreed).

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FACALITY OF CIVIL AND ENVIRONMENTAL ENGINEERING
CONSTRACTION ENGINEERING AND MANAGEMENTCHAIR

# ASSESSMENT OF BIDDERS QUALIFICATION CRITERIA IN TENDER EVALUATION PROCESS, A CASE OF JIMMA CITY PUBLIC BUILDING PROJECTS

## QUESTIONNAIRE FOR CONSTRUCTION FIRMS

Dear Participant This MSc thesis research questionnaire is designed to the Assessment of bidder's qualification criteria in tender evaluation practice a case of Jimma city public Building construction project. The objective of the study paper is to the assessment of bidder's qualification criteria in tender evaluation practice a case of Jimma city building project. The information obtained will be used for academic purpose only; all information and feedbacks will be kept strictly confidential. Your experience and educational background in the construction industry will greatly contribute to the success of my study and I believe this kind of study will be an input for the development of Ethiopian construction industry. So, I am kindly requesting you to respond each and every question. Thank you, Yours Sincerely,

Terefe Zerfu Degife
**Email: Zerfuterefe@gmail.com**

**Part One: General information**

1. Name of your Company_____
2. Grade of the company _____
3. Your position in the company_____
4. Year of establishment of the company _____
5. Profession_____

Project manager ☐ office engineer ☐ site engineer ☐ Quantity Surveyor ☐
Sites supervisor ☐ resident engineer ☐ other, please specify……

4. Level of education

Certificate or Diploma ☐ Bachelor's Degree ☐ Master's Degree ☐ other, please Specify……

5. Year of experience, in years0-5 ☐5-10 ☐ 10-15 ☐ 15-20 ☐> 20 ☐

6. Who are your major clients?

Governmental organizations ☐Private individuals and organizations ☐both public and private figures ☐others, please specify……

**Part two:** Pleas evaluate the questioner found in the following table in your company selection Desertion using liker scale method of evaluation for Strangely dis agree (1), for Dis agree (2), for Neither agree/dis agree(3), for agree(4), for Strangely agree(5)

Section B Pleas complete section B1 to B5 using liker scale 1-5 for each questionB1 Pleas evaluate the importance of formal BIDDERS PREQUALIFICATION exercise before project tender both public and private figures ☐others, please specify……
Part two: Pleas evaluate the questioner found in the following table in your company selection Desertion using liker scale method of evaluation for Strangely dis agree (1), for Dis agree (2), for Neither agree/dis agree(3), for agree(4), for Strangely agree(5)

| **Item** | **Description** | Strangely dis agree | Dis agree | Neither agree/dis agree | agree | Strangely agree |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 1 | In what level /degree will pre-qualification criteria directly affect project performance? | | | | | |
| 2 | The Time given for the bid evaluation process with pre-qualification criteria mostly Excess | | | | | |
| 3 | The Time given for the bid evaluation process of pre-qualification criteria mostly Sufficient | | | | | |
| 4 | The Time given for the bid evaluation process of pre-qualification criteria mostly Short | | | | | |
| 5 | Practice of mitigating problems which are observed on previous pre-qualification criteria experience | | | | | |
| 6 | Trend to document previous bid evaluation process pre-qualification criteria challenges for review and future reference | | | | | |
| 7 | An opportunity to have training or seminars on how to select bidders with pre-qualification criteria in the organization | | | | | |
| 8 | Neglecting pre-qualification criteria after screening least responsive bidders may affect contractor selection | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 9 | Technical qualifications criterion of the technical evaluation subjective criterion avail most | | | | | |
| 10 | Financial qualification criterion of the technical evaluation subjective criterion avails most | | | | | |
| 11 | Management qualification criterion of the technical evaluation subjective criterion avails most | | | | | |
| 12 | We follow Engineering estimation strategy perspective to screen unreasonable least offer | | | | | |
| 13 | We Determine minimum qualification criteria in preparing public building construction tender with PPA manual | | | | | |
| 14 | There is controversial or un-parallel setting of minimum criteria for contractor registration by Ministry of Construction verses public procurement units for tendering | | | | | |
| 15 | Under estimating the influence of contractor selection pre-qualification criterion to meet project objective. | | | | | |
| 16 | Less assignment of technically capable personnel with pre-qualification criteria in the bid evaluation team. | | | | | |
| 17 | Less or insufficient time allotting to bid evaluation with pre-qualification criteria. | | | | | |
| 18 | Setting subjective qualification criterions have effect on project quality | | | | | |
| 19 | Incapability to know pre-qualification criteria bid evaluation process in the client side. | | | | | |
| 20 | Members of bid evaluation team are capable of knowledge of pre-qualification criteria against evaluation process | | | | | |

Section B Pleas complete section B1 to B5 using liker scale 1-5 for each questionB1 Pleas evaluate the importance of formal **BIDDERS PREQUALIFICATION** exercise before project tender

| **Item** | **Description** | Strangely dis agree | Dis agree | Neither agree/dis agree | agree | Strangely agree |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 1 | We always carry out formal pre-qualification criteria | | | | | |
| 2 | The company undertakes a standard pre-qualification form for every new project | | | | | |
| 3 | Formal pre-qualification is not an important criteria in the bidders selection process in our company | | | | | |
| 4 | Our company does not have the manpower to handle formal prequalification exercise | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 5 | Our company is willing to work with exercise bidders no matter what is the outcome | | | | | |
| 6 | The rally/revive/ on formal prequalification to source for qualified bidders for our project | | | | | |
| 7 | We believe that the prequalification will help us to find "the best value bid " | | | | | |
| 8 | The company believes that pre-qualification is purely subjected analysis | | | | | |
| 9 | The prequalification exercise would not produce the result, it is intended as the final selection method always dependent on bid sum | | | | | |
| 10 | Bid evaluation process qualification criteria directly affect my project performance? | | | | | |

B2 Pleas evaluate the importance of **COMPANY STANDING** in your company selection decision to tender for your company project

| **Item** | **Description** | Strangely dis agree | Dis agree | Neither agree/dis agree | agree | Strangely agree |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 11 | The bidders emus have a strong financial record such as paid up capital, analysis of account and positive annual income | | | | | |
| 12 | The bidders must have good credit rating such as bank financing facility or arrangement and reference | | | | | |
| 13 | It is important the bidders have a past turnover equal or higher than the project they are being asked to bid for | | | | | |

B3 Pleas evaluate the importance of **TENDER PRICE** in your company selection

| **Item** | **Description** | Strangely dis agree | Dis agree | Neither agree/dis agree | agree | Strangely agree |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 15 | Price is the single most important pre-qualification criteria in the bidders selection process | | | | | |
| 16 | Our company is always awarded the project to the lowest bidders | | | | | |
| 17 | This company always compares renderer prices with the lowest bidder | | | | | |
| 18 | The company always puts pressure on the bidders to lower their bid price | | | | | |
| 19 | My company bound to accept lowest tender bid | | | | | |

B4 Pleas evaluate the importance of **TECHNICAL EXPERTISE** in Your company selection decision

| Item | Description | Strongly dis agree | Dis agree | Neither agree/dis agree | agree | Strangely agree |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 20 | The bidders must have a minimum of five years in the business experience | | | | | |
| 21 | The bidders must be registered bidders with the Ethiopian construction industry development board or the relevant board for the type of project tender | | | | | |
| 22 | It is important for the bidders to have completed similar size and type of project in the past | | | | | |
| 23 | This company always checks the bidders past project record such as project failure and on schedule performance | | | | | |
| 24 | The bidders summit their quality control (QC) policy and audited work quality records | | | | | |
| 25 | It is important that the bidders employed in house full time qualified quality management team such as project manager, engineers and quality surveyors | | | | | |
| 26 | It is important that contractors have the relevant IT knowledge, such as an electronic document management system, e-tendering capability, AUTOCAD or equivalent soft wars for information software for information exchange | | | | | |
| 27 | It is important that the contractor summit the list of their subcontractor and suppliers. | | | | | |
| 28 | Price is the single most important criteria in the contractor selection process | | | | | |
| 29 | The prequalification exercise would not produce the result it is intended as the final selection method always dependent on tender sum | | | | | |
| 30 | The following qualification criterion are the only most important and recommended for bid evaluation such as Technical qualifications, financial qualification, experience qualification , resource qualification, Management qualification, Health and Safety | | | | | |

B5 CHOSE ONE (1) To recommend appropriate tender evaluation criteria for public building construction project and qualification criteria approach to evaluation contractors' technical ability.

| Item | Description | Strongly dis agree | Dis agree | Neither agree/dis | agree | Strangely agree |
|---|---|---|---|---|---|---|
| 31 | Selecting lowest bidder from least responsive offers by avoiding technical score for further evaluation process is most recommended | | | | | |
| 32 | Formal pre-qualification is not an important criteria in the contractor selection process | | | | | |
| 33 | The prequalification exercise would not produce the result it is intended as the final selection method always dependent on tender sum | | | | | |
| 34 | Neglecting technical evaluation after screening least responsive bidders affect contractor Selection | | | | | |

**Part three: Oral questioner**

1. Are you using all volume of PPA?
2. In Jimma city haw many contractors are found?
3. Up to know how many tenders you prepared?
4. Up to know how many contractors are completed?
5. Up to know how many contractors hand over the project?
6. Up to know how many contractors suspended the project?

Q1. What tendering procedures used for contractors selection

1. Survey practice
2. Negotiation
3. Restricted Biding
4. Two stage selection -prequalification and financial selection

Q2. How do you determine Contractor qualification criteria?

1. By project size
2. By project type and complexity
3. By regulation and department
4. By clients requirement

Q3. How important the bid price and other three types of bidder's evaluation criteria; legal Requirement, Financial criteria, Technical and Managerial criteria

1. Very high
2. High

3. Medium
4. Low

Q4.To evaluate Haw important separate bidders evaluation criteria rating of importance of Legal requirement construction contractor

1. Claim
2. Contractual dispute

Q5. The biding gal of the company?

1. They used biding to assure selection of an appropriate bidders
2. Using standard procedures

Q6. The average weightage of used for bid evaluation process classified by project type

1. For Technical
2. For Financial

Q7. The average weightage of used for bid evaluation process classified by project Size

1. For technical
2. For financial
3. For Technical & For financial

Q8. Dissemination of information quorum for bid evaluation mitting's

1. By oral
2. By written letter

Q9. Bid evaluation member work BEP size of tender evaluation panel

1. 1-5
2. 6-10
3. 11-15

Q10. Activates of bid evaluation panel

1. Announcing of bid opening date for bidders and members
2. Bid opening
3. Bid evaluation (financial and technical)
4. Announcing bid award
5. Preparation of contract form and contracting agreement 6. all

Q11. Duration of Bid evaluation Report

1. One week
2. Two week
3. Three week

Q12. Criteria used to select bid evaluation panel

1. Member of bid evaluation panel
2. Skill of awareness on technical and financial knowledge skill
3. Discipline of the can date

Q13. Selection of bid evaluation chairman

1. From bid evaluation committee
2. From outside of member

Q14. Problems of Identification and selection of contractors

1. Bidders un fulfillment of document
2. Lack of detail description of PPA on evaluation criteria
3. Members, Lack of skill on Financial and Technical evaluation
4. Bidders , bid extremely exaggerated high or low price

Q15 Dissolution of bid evaluation Team

1. Yes By letter
2. Verbal communication

Q17 Duration of bid evaluation

1. One weak
2. Two weak
3. Three weak and above

******THANKYOU FOR YOUR PARTICIPATION******