

Assessment Of Ethical Behavior Among Professionals At Procurement And After Tendering Process With Its Impacts And Drivers In Nepalese Construction Industry

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Abstract: Objective of this study is to assess ethical behavior among professionals at procurement and after tendering process with its impacts and drivers in Nepalese Construction Industry. Different literatures were reviewed to assess ethical practices along with its cause and effect inside Nepalese Construction Industry. Pilot study was conducted for the validity of the questionnaire. One key informant from each selected organization was interviewed. The questionnaire contains shortcomings of ethical behavior at procurement and after tendering phase, impact of shortcomings of ethical practices and factors leading to these ethical practices based on the objectives of the research. Five ranking Likert Scale were used. The collected data were analyzed based on relative importance index (RII) in three different categories as Investigating Offices (3 numbers), Professional Associations (4 numbers) and Government Departments (4 numbers) with total of 11 organizations. All together 240 respondents were targeted out of which 170 response were collected with response rate of 70.83%. The research shows that for commitment of professionals "The overall level of unethical conduct in construction industry" is placed at first rank with agreement level of 72.7%. For Professionals shortcomings of ethical behavior at procurement phase "Individuals or organizations undertaking work without adequate qualification / experience / training" is placed at first rank with agreement level of 68.00%. For Professionals shortcomings of ethical behavior after awarding the Tender "Contractor's professional don't dispose waste in suitable and safe ways which is friendly with the environment" is placed at first rank with agreement level of 67.50%. For factors lead to shortcomings of ethical behavior "Personal culture or personal behavior" is placed at first rank with agreement level of 78.20%. From the research, it is clear that shortcomings of ethical behaviors have negative impact firstly on cost as it affects the profitability of the organization and causes loss for these organizations every year. Secondly, it affects the projects quality as it is noticed that construction projects quality in Nepal ranges from moderate to very low. The dissemination of ethical awareness, heavier penalties, compulsory training, and setting code of ethics are considered the best ways to monitor these shortcomings of ethical behaviors occurred in construction industry. The codes of practice are the most feasible way to attempt change behavior. Characteristic and responsibility that professionals should have is important in order to perform their work. With a good character and full set of responsibilities in hand, professional will always know what to do when facing problem and will try their best to avoid any shortcomings of ethical behavior. A self-building training and motivation to comprehend the professional about the responsibility and character as an ethical professional should be conducted from time to time.

Index Terms: Code of Conduct, Construction Industry, Ethics, Ethical Behavior, Factors Lead, Impacts, KII, Procurement System.

1 INTRODUCTION

1.1 Background

Nepalese Construction Industry is still regarded as in infant stage can play a vital role to uplift the socio-economic status through infrastructure development [1]. Importance of construction in economy stems from three of its characteristics: firstly its size, secondly that it provides predominantly investment goods and thirdly that the Government is the Client for large parts of construction works. As Nepalese Construction Industry contributed around 10 to 11 percentages to GDP and it uses around 35 percent of Government budget, it is estimated that this sector is creating employment opportunities to about one million people. So, it generates employment next to agricultural sector in the country. Similarly, about 60 percentages of the nation's development budget is spent through the use of contractors. From this, it is clearly seen that construction is a major sector and any productivity enhancement activity in this sector will have a positive impact in overall improvement of the national economy [2].

It is regulator of the economy. It is contracting part of the industry which undertakes to organize, move and assemble the various materials and component parts so that they form a composite whole of a building or other construction works. The Government, the consulting and construction industry and the private sector working together for the common cause of the building nation, can bring remarkable changes in quality of life of the people through the delivery of effective and efficient infrastructure services. There is a need now to strengthen the role of each agency with clear guidelines and growth oriented focus. This is the key for boosting economic and social prosperity of the country [3]. The construction industry is characterized by operation of numerous small operators who subcontract for the available work. This structure has produced an adversarial culture, under-capitalization, and low margins with little or no investment in research and development of new processes or use of new technologies, short-term focus relationships and planning, fragmented approach [4]. Moreover, complexity of construction industry can be clearly shown in its twisted relations with regulators and its inter-organizational relationships, so the performance of industry highly depends upon the professionals engaged in this sector. Only rules and regulations could not be enough to manage its performance. So, the improvement of ethical practices and behavior of the individuals in this industry will work to develop it, and improve its performance through establishing mutual understanding of the rights of each party in the industry, and recognize the duties and obligations of each. Therefore these improvements of ethical behavior will lead to

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improve construction project's quality, time and costs [5].

1.2 Rationale

Nepal has entered into the era of building new Nepal. Development activities are increasing day by day. Being a developing country, Nepal offers promising employment opportunities for the contractors in Roads and Airports, Irrigation and Hydropower, Real State and Housing and Public Private Partnership in infrastructure development. The quality of work in any industry depends upon the type of professionals engaged and their ethics along with ability and competence. One of the most important issues that currently arise within the construction industry environment is ethical practices. A high level of ethical performance implies a high level of professional performance, and hence, a low level of client dissatisfaction. The success of construction project depends mainly on the behavior of the parties involved in the project from starting to finishing stages. Most company's works at construction industry are exposed to shortcomings ethical behavior during projects lifetime. There are many factors that cause people to get involved in ethical issues in construction industry and most of shortcomings conducts are located in the project procurement process [6]. Professionals are known for its ethical conduct as its characteristics are integrity, independence, impartiality, responsibility, competence and discretion. The implementation of these characteristics determines the success of that industry [7]. Local researches in this area have been found to be very few. This research aims to investigate the ethical issues in construction industry and give a picture about shortcomings in ethical situations in the Nepalese construction industry.

1.3 Objective of the Study

The overall objective of the study is to assess ethical behavior among professionals at procurement and after tendering process with its impacts and drivers in Nepalese Construction Industry.

1.4 Limitation of the Study

The researcher has to rely on perception for the data collection as secondary data could not be found adequately in this area.

2 LITERATURE REVIEW

Literatures has been collected and reviewed to get the basic idea on ethical behavior among professionals research progress made on the proposed field of study. Some of them are:

2.1 Ethics Definition and Philosophy

Ethics is generally defined as a system of moral principles, by which human actions and proposals may be judged good or bad, right or wrong; and the rules of conduct recognized in respect of a particular class of human actions [8]. Ethics is defined as the moral principles by which a person is guided. Ethics is something that done every day it is not only about long words and dilemmas but is about people: people with different views, value and experiences. It is a way to know that your beliefs are valuable, and stand by that value, and respect other people values [9]. Ethics is defined as the discipline dealing with what are good and bad about moral duty and obligation [10]. Ethics is a branch of philosophy that involves systematizing, defending, and recommending concepts of right and wrong behavior. It comes from the Greek word *ethos*,

which means "character". Major areas of study in ethics may be divided into 3 operational areas, Meta-ethics, about the theoretical meaning and reference of moral propositions and how their truth values (if any) may be determined, Normative ethics, about the practical means of determining a moral course of action, Applied ethics, about how moral outcomes can be achieved in specific situations.

2.2 Professional Ethics in Construction Industry

Fellows [11] and Hamzah et al. [12] stated that professional ethics is a system of behavior norms. Such norms related to the employment of the particular knowledge and so, largely, concern the relationship between experts and lay persons so that both the morality and behavior of professionals could be dealt with in their day-to-day practice by this system. The definition of professional ethics recognized by the working party is giving of one's best to ensure that clients' interests are properly cared for, but in doing so the wider public interest is also recognized and respected. Construction industry today live in order to serve the world's population and meet their needs in the provision of shelter and conquer distances, protection from disasters and other basic human needs that have not changed over the centuries. But the process of construction and its surrounding environment has become more complicated as the laws and regulations, governmental and environmental permits have increased and become more severe stresses. Thus, construction projects also increased in its size and it becomes needy to experts, professionals, high-tech equipment, and better control systems. This trend will require that tomorrow's project leaders have technical, business, organizational, ethical, and leadership gift to complete their construction projects successfully [13]. The construction Management Association of America indicated more than 80 percent of almost 300 construction industry professionals (including architects, engineers and contractors) had personally witnessed shortcomings of ethical behavior in the previous year. The issues of professional ethics within the construction industry affect a wide spectrum of population. The local authorities, public works department, client organizations, consultants, suppliers, contractors, home buyers, and users of public infrastructure, are all within the scope of professional ethics. All those mentioned have their own contributions towards the problems in hand, and issues of ethics and integrity in the construction industry [12]. Wulf [14] stated that the new ethical issues are ones for the profession rather than ones for the individual. Issues for the profession are called macro ethical questions in contrast to those for the individual, which are called micro ethical questions. Sinha et al [12] pointed that there is a lack of focus in the construction field regarding the integration of social impact awareness and ethical behavior into professional practice. There are many reasons why professionals are involved in shortcomings of ethical practices. This may be due to insufficient legislative enforcement, fierce competition, the economic downturn, insufficient ethical education from schools and professional institutions, cultural changes and high complexity of construction works [15]. Professionals have always been linked with the notion of "service". This perceived relationship provides the basis for those who describe a profession as a group of people organized to serve a body of specialized knowledge in the interests of society specifically takes this view in describing professions as "groups that apply special knowledge in the service of a client" this altruistic spirit of a

genuine profession cannot be achieved without an ethics component [16]. The main goal of professional work should be far broader than physical or financial interests of the client or the professional himself. The engineering profession since has direct effect on the lives of people, these professionals owe special moral responsibility. However, it has been suggested outweigh their responsibility to others, such as public [17]. Bond [18] stated that there is no difficulty or conflict between the professional ethics of an engineer and the social responsibility of his organization, they both seek low levels of risk and show the levels of social responsibility that the Government and the public are demanding.

2.3 Professional Code of Conduct

The professional code of conduct to be followed by the registered Engineers of the Council, subject to the provision of the Nepal Engineering Council (NEC) act, 1998 and the Nepal Engineering Council Regulation, 2000, has been published as follows:

1. **Discipline and Honesty:** The Engineering service/profession must be conducted in a disciplined manner with honesty, not contravening professional dignity and well-being.
2. **Politeness and Confidentiality:** Engineering services for customers should be dealt with in a polite manner and professional information should remain confidential except with written or verbal consent of the customers concerned. This, however, is not deemed to be a restriction to provide such information to be concerned authority as per the existing laws.
3. **Non-Discrimination:** No discrimination should be made against customers on the grounds of religion, race, sex, caste or any other things while applying professional knowledge and skills.
4. **Professional Work:** Individuals should only do professional work in their field or provide recommendations or suggestions only within the area of their subject of study or obtained knowledge or skills. With regard to the works not falling within the subject of one's profession, such works should be recommended to be done by an expert of that subject matter.
5. **Deeds which may cause harm to the Engineering Profession:** With the exception of salary, allowance and benefits to be received for services provided, one shall not obtain improper financial gain of any kind or conduct improper activities of any kind, which would impair the engineering profession.
6. **Personal Responsibility:** All individuals will be personally responsible for all works performed in connection with his/her engineering profession.
7. **State Name, Designation and Registration Number:** While signing the documents or descriptions such as the design, map, specifications and estimates etc., relating to the engineering profession, the details should include the name, designation and NEC registration number and should be stated in a clear and comprehensible manner.
8. **No publicity or advertisement must be made which may cause unnecessary effect:** In connection with the professional activities to be carried out, no publicity or advertisement shall be made so as to cause unnecessary effect upon the customers.

2.4 Public Procurement System in Nepal

It is the concern of any Government to achieve and enhance the effectiveness, efficiency, transparency and equity in public procurement because it affects all aspects of people's lives and assumes a large share of Government budget. The Government of Nepal (GoN) is the largest procuring (Goods, Works and Services) institution in the country. Some 60 percent of the annual national budget goes to procurement. Hence, public procurement plays a critical role in the economy and is an important factor in economic growth. A comprehensive legislative framework governing procurement has yet to be completed. However, the basic elements of a public procurement framework for the central Government level are set out in the financial administration, a regulation passed at the executive level. Public guidelines supplement these rules. Federal and Provincial procurement system has yet to be developed. Local Governments as well as state owned enterprises conduct procurement under their own rules harmonizing with the provisions of Governmental bodies' provisions. To remedy identified deficiencies in the legal framework, the Government of Nepal has brought a Public Procurement Act and Regulations. These seek to render the Government's expenditure more transparent and to avoid losses through corruption. Procurement is carried out by individual Government Departments or Agencies. No central body is responsible for developing procurement policies or supervising procedures. At the central Government level, procurement is done through open tendering, sealed quotation, or direct purchase. The choice of the procurement method depends on the value of the contract. Contracts for works and goods within limit have to be awarded through open tendering; contracts worth between stated amount ranges are awarded through sealed quotation; purchases worth less than Rs.100, 000.00 are made directly. Prequalification is conducted or the procurement of goods and works worth within stated amount. When awarding contracts for consulting services, quality and cost must be considered. To attract the greatest possible number of bidders, tender opportunities must be published at least twice in the national print media. For the sake of transparency, these advertisements must mention the selection criteria. Nepal formally forbids post-tender negotiations. Safeguarding and enforcing integrity specific measures to safeguard integrity in public procurement are of central importance, given the features of this process and the particular corruption risks that prevail therein. Curbing corruption in Public Procurement in Asia and the Pacific provide for preventive or repressive mechanisms to ensure the integrity of bidders and procuring agency staffs are not procurement-specific. Procurement staffs are required to respect the general code of conduct applicable to all public servants; this code and other regulations that apply to certain areas of procurement regulate the handling of gifts and prohibit the acceptance of facilitation payments. Nepal regularly rotates public officials involved in public procurement to prevent the establishment of relations between procurement staff and potential suppliers that could lead to favoritism. The mechanisms in place to deter and sanction corruption in public procurement are essentially based on provisions of the criminal code. Nepal has not passed procurement-specific sanctions. While disqualification of a tenderer from bidding for a specific contract is a possible sanction for improper conduct, debarment from future contracts, a mechanism with substantial potential to deter suppliers, is neither regulated nor

practiced. Complaint and review mechanisms, essential ingredients in detecting, preventing, and bodies' provisions, deterring corruption in public procurement, are not established or regulated by law. It appears that in practice aggrieved bidders can only seek judicial review. Internal and external audit of procurement decisions is conducted at the end of every year to verify the proper conduct of procurement. All documents relating to the procurement proceedings are recorded and preserved for 20 years, thereby allowing a later review where necessary. Only a restricted number of officials, however, have access to such documents. Nepal has encouraged pursuing its efforts to establish a comprehensive legal framework for fair and transparent public procurement in the form of a parliamentary law applicable to procurement conducted by all public entities. This framework should notably define procurement procedures selection criteria and their application, meaningful sanctions for improper conduct by both suppliers and public officials, and review and complaint mechanisms. For better result, Nepal should also consider reviewing the existing codes of conduct for public officials with a view to amending them with procurement specific rules, and developing specific codes of conduct that take into account the particular mechanisms and corruption risks of public procurement. Nepal has encouraged establishing a central procurement as and the particular ADB/OECD Anti-Corruption Initiative for Asia and the Pacific. Moreover, due to importance of public procurement its function should be handled by a professional workforce equipped with needed skills and knowledge through training and education. Unfortunately, higher education institutions and educators have not recognized the educational needs of public procurement professionals [19].

2.5 Ethics and Quality of Projects

There are different perceptions on quality of local infrastructures. It is also common to compare different infrastructures from quality aspect. Though, different infrastructures serve to meet different requirements, their quality is not only important to make them sustainable but also contribute to provide services with value at large. There are problems and issues related to developing quality culture in the Nepalese Construction Industry in general. We have to recognize that quality also requires investment on people and policy like other area of socio-economic development. However, no such a visible investment is seen to focus quality issues related to the development of local infrastructures in the country, despite some efforts made on Adhoc basis. There is a greater need to focus on analyzing quality issues of local infrastructures and find the possible ways to resolve them in due course of time [20]. Human factors are the causative of the majority of quality-related issues. The issue of professional ethics plays an important role in quality-related problems in a construction project [12]. The industry has a reputation for poor quality and service, a bad safety record, and a history of broken promises and sharp practice [21]. Shortcomings of ethical behavior by the parties impact the quality of projects [12]. Contractors and clients that are in the construction industry will try to get projects using whatever methods including shortcomings of ethical behavior that ignores morality and integrity. This is because they are willing to do anything to survive during the economic downturn. Due to this shortcomings of ethical behavior by the construction industry parties, there is a big impact on the quality of the project [6].

Hamzah et al. [12] mentioned that quality is dependent on ethical behavior, whereby quality and ethics have a common care premise which is to do right things right and it is a proven way to reduce costs, improve competitiveness, and create customer satisfaction. It is apparent that low ethical standards among construction professional will lead to quality problem. Increase in shortcomings of ethical behavior will see a consequential decline in the quality of project performance as evidenced by statistics from the construction sites. The ethics is considered as the fourth most important dimension in the project [22].

2.6 Summary of Literature Review

Through the literature review, reveals the complexities of managing ethics in business and identifies a tension between the theory and practice of ethics, many issues related to ethics in construction industry are discussed. In addition, through exploring various issues that are related to ethics, detrimental effects of unethical behaviors to the construction process have been discussed and clarified, it also highlight the differences in perception of what constitutes ethical behavior, the importance of individual and situational factors including the impact of ethical philosophies, decision ideologies, and organizational factors. All these are helpful in identifying the boundary and scope of the study. It is noticeable that although the concept of ethics and its importance have been extensively discussed in existing literature, there has been very little empirical evidence on pattern of ethical behaviors. Given that it is an open secret that unethical behavior are ubiquitous in the construction industry, this research intent through methodology of this research, to establish such a pattern of ethical behavior. Through a questionnaire survey, it is expected that a pattern of ethical behavior, causes and preventive action for unethical behavior can be identified.

3 METHODOLOGY

This chapter discusses the methodology which is used in this research. The methodology includes review of literature related to shortcomings of ethical practices, information about the research design, population, sample size, data collection, questionnaire design, questionnaire content, pilot study, and the method of processing and analyzing the data. The questionnaire was the main approach to collect the data and perspectives of the respondents. The objective of the present study is to investigate the current status of shortcomings of ethical practices in construction industry in Nepal with more focused on procurement process.

3.1 Research Approach

The research was conducted through Questionnaire Survey and Key Informant Interview (KII) (KII) was done for the reliability and validity of collected data. So, the research is of mixed approach of qualitative and quantitative research.

3.2 Study Population

As the population of the research is limited to 3 investigating offices (National Vigilance Centre, Commission for the Investigation of Abuse of Authority, Public Procurement Monitoring Office), 4 Professional Associations (Nepal Engineering Council, Nepal Engineers Association, Society of Consulting Architectural and Engineering Firms, Federation of Contractors Association of Nepal) and 4 Government Departments (Department of Roads, Department of Water

Supply and Sewerage, Department of Urban Development and Building Construction, Department of Engineering-Nepalese Army) are used as the targeted population. The total number of targeted group was 11 organizations. Since, it was small group all the population was selected to perform the study. So, each fifteen to thirty copies of the questionnaire were distributed with total of 240 questionnaires. The response rate was found to be 70.83%.

3.3 Pilot Study

Eleven experts having 10-15 years of experience were contacted to assess the questionnaire validity, one expert from each organization was asked to verify the validity of the questionnaire issues and its relevance to the research objective. Two experts in statistics were asked to identify that the tools used was valid statistically and that the questionnaire was designed well enough to provide relations and tests among variables. Expert comments and suggestions were collected and evaluated carefully. At the end of this process, modifications and additions were introduced to the questions and the final questionnaire was constructed for distribution.

3.4 Data Collection and Measurement

In this research, ordinal scales were used. Ordinal scale is a ranking or a rating data that normally uses integers in ascending or descending order. The numbers assigned to the importance (1, 2, 3, 4, 5) do not indicate that the interval between scales are equal, nor do they indicate absolute quantities. They are merely numerical labels based on Likert scale as shown:

1	Item	Very High	High	Moderate	Low	Very Low
	Scale	(5)	(4)	(3)	(2)	(1)

2	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	Scale	(5)	(4)	(3)	(2)	(1)

3.5 Data Analysis

The researcher has used both qualitative and quantitative data analysis methods. Relative Importance Index is used for ranking purpose which is calculated as follows:

$$RII = \frac{\sum W}{A \times N} \quad (0 \leq RII \leq 1)$$

Where,

W = weight given to each factor by the respondents and ranges from 1 to 5 (where 1 is strongly disagree or very low and 5 is very high or strongly agree);

A = Highest weight (i.e 5 in this case) and;

N = Total number of respondents.

4 RESULTS AND DISCUSSION

This part consists of results and discussion of shortcomings of ethical behavior prevailing among professionals in Nepalese Construction Industry. These behaviors were categorized into overall rank of commitment of Professionals, overall rank of shortcomings of ethical behavior at procurement stage, overall rank of shortcomings of ethical behavior after awarding the tender and overall rank of factors lead to shortcomings of ethical behavior.

4.1 Commitment of Professionals

Investigating Offices ranked 'The overall level of unethical conduct in construction industry' in fifth place whereas Professional Associations ranked it at second place and Government Departments ranked it in first place. The overall rank was found to be placed in the first position. Further, Investigating Offices ranked 'Professional intends to build trust and confidence with clients and workers' in seventh place whereas Professional Associations ranked it at first place and Government Departments ranked it in second place. The overall rank was found to be placed in the second position. During Key Informant Interview (KII), it was found that tender notice was not adequate in Nepalese Construction Industry. Contract document is too bulky to be read so all clauses of contract document couldn't be viewed in detail. Some of the Government agency hire consultant though they have number of experts for the same work. As they obtained the experience they should be expert to perform technical work like designing and field visit though they become reluctant to perform the technical work with experience. Also, it was noted that the ethical commitment of Professionals could be controlled to some extent by yearly work performance evaluation.

4.2 Professionals Shortcomings of Ethical Behavior at Procurement Phase

Investigating Offices ranked 'Individuals or organizations undertaking work without adequate qualification/experience /training in third place whereas Professional Associations ranked it at seventh place and Government Departments ranked it in first place. The overall rank was found to be placed in the first position. Further, Investigating Offices ranked 'Agree of one contractor to withdraw an offer he has made in exchange for money or other benefits' in tenth place whereas Professional Associations ranked it at first place and Government Departments ranked it in second place. The overall rank was found to be placed in the second position. During Key Informant Interview (KII), it was also found that according to the Public Procurement Act – 2063, pre-qualification of contractors is necessary for the public work with an estimated amount exceeding NRs. 6 millions. However government does not still have any standard guidelines for the pre-qualification and hence executing agencies develop their own guidelines which differ from project to project and institution to institution. Moreover, still there is lack of standard pre-qualification criteria under the new procurement act. Likewise, for the project funded by international agencies, pre-qualification is still carried out according to their own guidelines. As a result, pre-qualification document will be complex, inappropriate and will be difficult to follow by local contractors to uplift their capacity. During Key Informant Interview (KII), it was found that some agency provides Tender Notice on less popular national daily newspaper with limited number of copies and later on it was distributed to the essential offices just for record so that it seems that everything is legal due to some vested interest.

4.3 Professionals Shortcomings of Ethical Behavior after Awarding the Tender

Investigating Offices ranked 'Contractor's professional don't dispose waste in suitable and safe ways which is friendly with the environment' in first place whereas Professional Associations ranked it at first place and Government Departments ranked it in sixth place. The overall rank was

found to be placed in the first position. Further, Investigating Offices ranked 'Negligence like late and short payments, poor quality and inadequate information, lack of supervision, lack of safety ethics, bad documentation unfair treatment of contractor' in fourth place whereas Professional Associations ranked it at second place and Government Departments ranked it in second place. The overall rank was found to be placed in the second position. During Key Informant Interview (KII), it was found that, Contractors are not paid on time, in general, for the progress claimed. This creates obstructions in cash flow and the contractor has to supplement funds from external sources with a high interest rate, which in turn affects both the time and quality of construction. These delays, caused by bureaucratic procedures have created real problems. Budgets are not sanctioned in time. In most cases, it takes more than 3 months to access the budget at project level after it has been sanctioned. Sometimes, because of political reasons, projects are formulated and tendered without budget. In addition, the project's major personnel are frequently changed. This also creates problem and difficulties in the project implementation process. During Key Informant Interview (KII), it was found that the supplier for the Project changes with the change of project Manager so there may be some vested interest of Project Manager resulting into project suffers. Even PM keeps asking for unnecessary detailing of the bill at the last date of bill clearance resulting into late payments. Sometimes, it becomes a challenge for a Project Manager to ask his subordinate to perform some sorts of job as the subordinate has been appointed from Public Service Commission but is not skilled enough to perform the job. During Key Informant Interview (KII), it was noted that, that some Project Managers ask the contractor to hire their equipment in handsome rate which will result in negotiation in quality works with PM. Also, it was noted that efficient user's committee should be part of every project to ensure quality along with ethical practices.

4.4 Impact of Shortcomings of Ethical Behavior on Construction Industry

This part consists of results and discussion of impact of shortcomings of ethical behavior on construction industry.

4.4.1 Impact of Shortcomings of Ethical Behavior on Cost

83.53% of respondents from the total sample agreed that there is a positive relationship between ethical behavior and long-term profitability of the company and 34.12% of respondents also agreed that there is positive relationship between ethical behavior and short term profitability of the company.

4.4.2 Impact of Shortcomings of Ethical Behavior on Project Quality

64.12% of respondents evaluated the quality of Nepalese construction industry as moderate and 2.94% of respondents evaluated as very low. The quality of projects is very important aspect, by improving it the projects will enhance and shortcomings of ethical behavior decrease the quality. This is an indication to give priority to improve shortcomings of ethical behavior to arise with quality of projects. During Key Informant Interview (KII), it was found that the contract is awarded to the lowest bidder, even though according to the tender document other factors are also to be considered during the bid evaluation. As a consequence of this unhealthy practice, smaller contractors often reduce their bids to uneconomic

levels. This will have negative impact on both quality and duration of the project. It is also to be mentioned here that some foreign contractors also participate in local tender, which is considered unfair by the local contractors.

4.4.3 Organizational Ethics

55.29% of respondents agreed that shortcomings of ethical behavior can be gained from work, 65.88% indicated that personal ethics are taking over business ethics but 75.29% of respondents haven't deal with an organization including shortcomings of ethical items in its contract. 91.76% of respondents think that improving ethical practice for the professionals could improve ethical performance in construction projects in Nepal. 70.00% of respondents mentioned that the organization didn't add special items outside the legal requirements for contracting, 15.88% of respondents said that there is no a clause in the tender documents or contract providers for the control or prevent shortcomings of ethical behavior with the contractor. 42.35% of respondents evaluated the level of employees' ethical awareness as moderate and 32.94% described it as high, which give positive vision to enhance the ethical behavior to acceptable levels. During Key Informant Interview (KII), it was noted that due to lack of effective provision of reward and punishment, the level of ethical awareness in employees in organization is not up to the standard. 27.65% of respondents described that the major difficulty to develop strong ethical awareness is due to lack of support from management and 22.35% of respondents described as prevailing trends within the construction industry. 77.06% of respondents agree that provision of joint venture is just an adjustment for fulfilling legal requirements whereas 22.94% or respondents agree that it is ethically correct action. During Key Informant Interview (KII), it was found that sometimes Project Managers forces the company to come along with other company of their relatives in Joint Venture provision for having project experience as well as to increase financial capability. 40.00% of respondents agree that project fails due to lack of work experience, 32.94% of respondents agree that cause of failure is due to poor management.

4.4.4 Ways to Improve Ethical Behavior

87.06% of respondents have an ethical code of behavior, 75.00% of respondents organization applied this code. 79.41% think that existence of ethical code can improve Nepalese construction industry. During Key Informant Interview (KII), it was noted that though there is ethical code of conduct in most of organization but it is not effectively enacted. 62.86% of respondents attributed the difficulty of applying code of behavior due to weak system (personalities being more powerful than system) and 37.14 % attributed to inflexible government rules. 43.53% of the respondents will report to top management and 34.71% will try to correct it when they witness unethical practices. 30.00 % of respondents convinced that the best way to enhance ethics is by dissemination of ethical awareness and 25.29 % of respondents convinced that it can be improved by charging heavier penalties. Although there are various methods and ways to solve the shortcomings of ethical behaviors among the professionals, the best ways is to make sure that the professionals are not being forced by the code and let them have the freedom to practice good ethics. Besides that, the involvement by the professionals on the concept and ways in reducing the problems will be essential

and this will guarantee the success of the methods. 40.00% of respondents agreed that the most serious phase in the construction project life cycle affected by shortcomings of ethical behavior is implementation phase and 24.71% with project planning.

4.5 Factors Leading to Shortcomings of Ethical Behavior

Investigating Offices ranked 'Personal culture or personal behavior' in eighth place whereas Professional Associations ranked it at first place and Government Departments ranked it in third place. The overall rank was found to be placed in the first position. Further, Investigating Offices ranked 'Excessive love for money (Greed)' in tenth place whereas Professional Associations ranked it at sixth place and Government Departments ranked it in second place. The overall rank was found to be placed in the second position. During Key Informant Interview (KII), it was found that some Project Managers use the Consultant firm by giving some service charges for consultancy works. All the works are formally done by consultant firm as seen but informally all the works like design, estimate, and report preparation are done by the agency office itself. It was also found that in Nepalese Army, they don't hire consultant from outside. All the consultancy works are done in-house by utilizing the capability of their own staffs.

5 CONCLUSIONS AND RECOMMENDATIONS

This chapter includes the conclusions and recommendations to enhance methods to solve these problems appearing in Nepalese Construction Industry. The research objectives were achieved through the data collection using questionnaire survey and Key Informant Interview (KII) techniques and the detail analysis of the survey results.

5.1 Conclusions

From the study, it can be concluded the following:

- The most abundant factors existing at procurement phase are "Individuals or organizations undertaking work without adequate qualification/ experience/ training", "Agree of one contractor to withdraw an offer he has made in exchange for money or other benefits", "Contractors accept money in order not to tender for contract has been invited to tender for", "Collusive Tendering", "Cover price" etc.
- It is concluded that "Contractor's professional don't dispose waste in suitable and safe ways which is friendly with the environment", "Negligence like late and short payments, poor quality and inadequate information, lack of supervision, lack of safety ethics, bad documentation unfair treatment of contractor", "Contractor's eloping from their duties after delivering the project", "Scarifying the national interest for any personal gain", "Bribery in the form of cash inducement, gift, favors, trips and appointments in the Nepalese Construction Industry", "Compromise on quality", are the most abundant factors existing after awarding the tender.
- From the research, it is clear that shortcomings of ethical behaviors have negative impact firstly on cost as it affects the profitability of the organization and causes loss for these organizations every year. Secondly, it affects the projects quality as it is noticed

that construction projects quality in Nepal ranges from moderate to very low. As respondents have suggested dissemination of ethical awareness, heavier penalties, compulsory training, and setting code of ethics are considered the best ways to monitor these shortcomings of ethical behaviors occurred in construction industry.

- It is concluded that 'Personal culture or personal behavior', Excessive love for money (Greed)", "Lack of transparency", "Political systems", "Poverty", "Favoritism", "Construction industry culture", "Profit maximization by contractor", are the most key factors that drive shortcomings of ethical behavior appearance in Nepalese Construction Industry.

5.2 RECOMMENDATIONS

The recommendations arising from the current research study are as follows:

- A standard of measuring the level of ethics among the professionals should be achieved for all professionals during yearly work performance evaluation.
- Indigenous quality assurance group and Users' Group should be part of every project team to ensure quality along with ethical practices.
- Effective punishments such as heavier penalties or even cancellation of license on repetitive violations should be strictly implemented.
- Provision of Technical and Social Auditing for every project should be done compulsory.
- A detailed Tender Notice should be published so that everything is clear to the Contractors.
- All stakeholders should perform their task based on project objectives.
- It seems that codes of practice are the most feasible way to attempt to change behavior. Characteristic and responsibility that professionals should have is important in order to perform their work. With a good character and full set of responsibilities in hand, professional will always know what to do when facing problem and will try their best to avoid any shortcomings of ethical behavior. A self-building training and motivation to comprehend the professional about the responsibility and character as an ethical professional should be conducted from time to time.

For the further study, it is recommended that:

- This research handled only 11 organizations which consist of 3 Investigating Offices, 4 Professional Associations and 4 Government Departments. Research can be carried out for many more organizations like NGOs, INGOs, Municipalities and private sector organizations. By doing this, more wide range of data can be collected and it will represent more bodies that involved in construction.
- For this study, only questionnaire survey is used. By using other methods the results will be more flexible and precise. Method such as Focus Group Discussion and comparing data could be adopted.

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