# INSURANCE REQUIREMENTS AND PRACTICES OF ETHIOPIA'S CONSTRUCTION SECTOR

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#### **ABSTRACT**

The principles of insurance and types of insurance policies in construction industry in general is discussed. The status of consultants and contractors in Ethiopian construction sector is briefly reviewed. Questionnaires were designed to preliminary assess whether relevant insurance policies are bought by contracting and consulting firms, and the results were evaluated and discussed. Conclusions and recommendations are given.

Keywords: Construction industry, Client, Consultant, Contractor, Contract, Insurance, Insurable interest, Indemnity, Liability, Policy, Premium, Risk management.

#### TOO INTRODUCTION moutibe

Insurance may be defined as a social device providing financial compensation for the effects of misfortune, the payments being made from the accumulated contributions of all parties participating in the scheme [3]. It may be seen as a kind of fund, into which all who are insured will pay an assessed contributions called *premium*. In return, those insured will have the right to call on the fund for any appropriate payment should the insured events occur. Based on the above definition, it may be seen that insurance exists to combat the adverse effect of risk in day-to-day activities.

It has been recognised that construction industry is one of the micro sectors of an economy of a country which accounts for not less than 15% of the GNP of both developed and developing countries. It is hardly possible to site any economic venture that does not pre-require construction investment. Construction work by nature is hazardous, and accidents are

frequent and often severe. The annual toll of deaths, personal injuries and property damage in the world construction industry is extremely high. The potential severity of accidents and the frequency with which they occur require that consultants and contractors protect themselves with a variety of complex and expensive insurance coverage. Without adequate insurance protection, the contractor would be continuously faced with the momentary possibility of serious or even ruinous financial loss.

It is understood that construction projects usually have in force several simultaneous contractual arrangements: between the client and consultant, between the client/consultant and general contractor and between the general contractor and his several sub-contractors and suppliers. These contracts can establish a complicated structure of responsibility for damages arising out of construction operations.

Presently, Ethiopia has relatively an extensive programme of infrastructure development and the infrastructure development of the country is growing faster. The construction of new regional and international air-fields, roads, high raised buildings and factory buildings are among the construction investments to be cited. The quality and standards of the design and construction of these investments play a significant role in the success of these investments. When the quality of design and construction works is considered the risk that is involved in construction works come into picture. In the developed world, it is almost impossible nowadays to go for construction business without sufficient cover of insurance.

The aim of this paper is, therefore, to discuss the needs and the types of insurance policies in the construction industry in general and to present preliminary assessment report based on the views of

construction and consulting firms in Addis Ababa, Ethiopia. This preliminary study is the outcome of a research undertaken in the Department of Civil Engineering, Addis Ababa University, with the involvement of graduate and undergraduate students. The paper is believed to increase awareness to those involved in the construction sector and serves as a stepping stone for a future detailed investigation in the subject area of insurance as related to the construction industry.

#### HISTORICAL BACKGROUND

A history of the earliest civilisations reveals that mankind has an early instinct to develop and perfect codes of conduct. The valley between Tigris and Euphrates rivers in present day Iraq is considered as the cradle of civilisation, and some of the earliest codes of conduct were developed there. These codes covered all forms of activity, including exchange rates, wages, rules of behaviour, physical and monetary penalties, and even specifications for materials. As far back as 2000 BC, the Laws of Eshnunna [1] decreed:

58: If a wall is threatening to fall and the authorities have brought the fact to the knowledge of its owner, (if nevertheless) he does not strengthen his wall, the wall collapses and causes a free man's death, then it is a capital offence; jurisdiction of the king.

The Code of Hammurabi [2], circa 1700 BC, also contained punitive construction codes:

229: If a builder constructed a house for a seignior<sup>1</sup>, but did not make his work strong, with the result that the house which he built collapsed and so has caused the death of the owner of the house, that builder shall be put to death.

230: If it has caused the death of a son of the owner of the house, they shall put the son of the builder to death.

231: If it has caused the death of a son of a slave of the owner of the house, he shall give slave for slave to the owner of the house.

232: If it has destroyed goods, he shall make good whatever it destroyed; also, because he did not make the house strong which he built and it collapsed, he shall reconstruct the house which he collapsed at his own expense.

The present day construction codes are basically derived form the past codes of conduct, but enriched with experience and modern scientific research outputs. A code of practice consists of a compendium of good practice to be used as a design aid by engineers. It summarises briefly the basic design assumptions, procedure of analysis and provides facts, and recommendations in a logical order and simplified expressions to avoid confusion in interpretations.

The development of insurance has also its own part in history. For instance, Marine insurance is considered to be the oldest known type of insurance. Something similar to it was practised at least 1000 years before the Christian era while the present day form of marine insurance probably began around the eleventh or twelfth century. The early development of life insurance was closely linked with that of marine insurance. The industrial revolution in Europe necessitated the development of fire and accident insurances. Then came motor, engineering and aviation insurances [3]. In all cases, community based activity is considered as the origin of modern age insurance which grew as a huge commercial sector covering a wide range of policies in all spheres of engagement. Nowadays, there are over 50 policies related to construction undertakings alone.

Despite the advancement of insurance as a commercial business, it is little understood and exercised in the Ethiopian society in general and the construction industry in particular. There are, currently, less than 10 government owned and private insurance companies in Ethiopia. Most of them, especially the private insurance companies, are new to the business but show a remarkable

<sup>&</sup>lt;sup>1</sup>A man of rank or authority.

development since their establishment in the last 6-8 years.

#### PRINCIPLES OF INSURANCE

The primary function of insurance is to spread the financial losses of insured members over the whole of the insuring community, by compensating the unfortunate few from the fund built up from the contributions of all members. Obviously, if insurance is to function equitably, the contributions to the fund by the individual must be commensurate with the likelihood of his claiming upon it and the possible extent of such a claim. For instance, the owner of a thatched-roof building of largely wooden construction should pay more into the fire insurance fund than the owner of a concrete building of equal value.

Whilst insurance exists, in principle to combat risk, there are certain legal, commercial and moral considerations which make it impossible to insure every conceivable kinds of risk. In addition to the common law of contract, the following rules in particular are considered to be the basic principles of insurance [3]:

- a) Utmost good faith (Uberrimae fidei): In an insurance contract the principle of Utmost good faith applies. The proposer must disclose all material facts to the insurer.
- b) Insurable interest: The insured must have an insurable interest in the subject matter of the insurance. The subject matter of the insurance can be property, life, potential liability, etc.
- c) Subrogation: This means that the insurer after paying a claim has the right of standing in the place of the insured and availing himself of all the rights and remedies of the insured whether already enforced or not, but only up to the amount of the insurer's payment to the insured.
- currently, less than 10 government owned and private insurance companies in Ethiopia. Most of them, especially the private insurance companies, are new to the business but show a remarkable

- d) Indemnity: Most policies are indemnity policies.

  This means that the object of these insurance's is to place the insured as nearly as possible in the same position after a loss as he was immediately before the happening of the insured event.
- e) Condition: Condition of the insurance may be specified. Policies can be separated into All Risk Policies and Specified Perils Policies.

Since civil engineering can be a risky and hazardous business, insurance is regarded as an important facet of civil engineering practices. Risks to be covered include: the collapse or damage of the contract works on neighbouring properties belonging to the third parties; the loss or damage to materials or plant and the injury or death of employees or members of the public. Typical risks associated with civil engineering constructions are schematically shown in Fig. 1.

Due to the fact that different bodies are involved in a typical civil engineering project (clients, consultants, contractors, sub-contractors, suppliers, employees, financiers, member of the public, etc.), it is important for every body to be sure that insurance is given proper attention and covers the expected risks satisfactorily without paying for unnecessary cover or duplication of cover. It reflects obviously on the professional competence of the insurer to discover after the occurrence of some disastrous event that the insurance premium one has been paying did not cover the incidence.

In the developed world, if somebody or some organisation does not have insurance cover or has difficulty in obtaining insurance cover then it is almost certainly because the insurance companies consider him as a bad risk. Hence, when selecting a firm to carry out construction works, it is wise to take account of the insurance company's opinion of the firm.

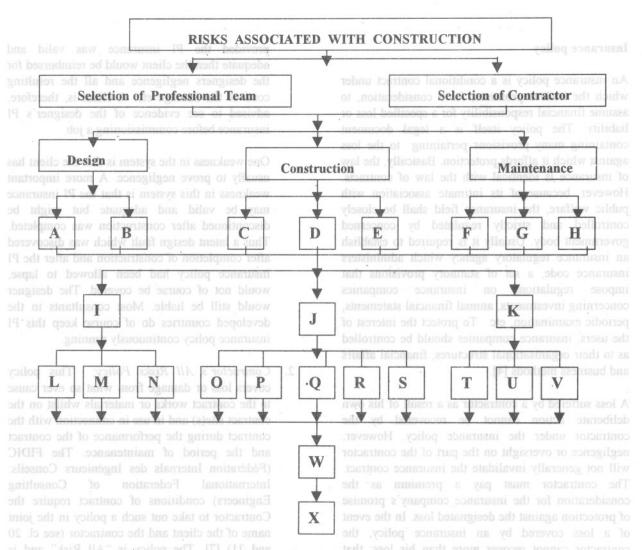


Figure 1 Summary of risks associated with Civil Engineering constructions.

#### RISKS ASSOCIATED WITH CONSTRUCTION

- A: Risks through mistakes.
- B: Risks through negligence and lack of care.
- C: Risks associated with the Site of the project.
- D: Risks associated with the Technical aspects of the project.
- E: Risks associated with Acts of Man.
- ano F: Design risks. of bride established amon add
- G; Construction risks. of the program of w
- H: Usage Risks.
  - I: Loss of Life and Personal Injury.
  - J: Material Damage.
  - K: Loss of time and consequential Losses.
  - L: Employer
  - M: Others associated with the project.

- N: Third parties
- O: Permanent and temporary works.
- P: Plant and machinery.
- Q: Property of the employer.
- R: Property of others associated with projects.
- S: Property of third parties.
- T: Employer. Rendered and the designers of the maker U: Contractor and Sub-contractor.
  - V: Professional Team.
- W: Responsibilities and Liabilities of the Contracting parties should be defined and agreed.
- X: Indemnity Through Insurance by Employer. Professional Team, contractor, individually or collectively.

#### Insurance policy

An insurance policy is a conditional contract under which the insurer promises, for a consideration, to assume financial responsibility for a specified loss or liability. The policy itself is a legal document containing many provisions pertaining to the loss against which it affords protection. Basically, the law of insurance is identical with the law of contracts. However, because of its intimate association with public welfare, the insurance field shall be closely controlled and strictly regulated by concerned government body. Usually it is required to establish an insurance regulatory agency which administers insurance code, a set of statutory provisions that impose regulations on insurance companies concerning investments, annual financial statements, periodic examination, etc. To protect the interest of the users, insurance companies should be controlled as to their organisational structures, financial affairs and business methods [4].

A loss suffered by a contractor as a result of his own deliberate action cannot be recovered by the contractor under the insurance policy. However, negligence or oversight on the part of the contractor will not generally invalidate the insurance contract. The contractor must pay a premium as the consideration for the insurance company's promise of protection against the designated loss. In the event of a loss covered by an insurance policy, the contractor cannot recover more than his loss; that means, he cannot make a profit at the expense of the insurance policy.

#### Major Types of Insurance Policy

The normal types of insurance policy in Construction Industry include the following:

1. Professional Indemnity Insurance (PI): It is taken out by the designers/consultants as cover against their liability for acting negligently. Thus in the event of a structure collapsing during construction because of faulty design, the client would sue the designer for negligence. Provided the client could prove negligence, and

provided the PI insurance was valid and adequate then the client would be reimbursed for the designers negligence and all the resulting costs of the damage etc. A client is, therefore, advised to see evidence of the designer's PI insurance before commissioning a job.

One weakness in the system is that the client has usually to prove negligence. A more important weakness in this system is that the PI insurance may be valid and adequate but might be discontinued after construction was completed. Thus a latent design fault which was discovered after completion of construction and after the PI insurance policy had been allowed to lapse, would not of course be covered. The designer would still be liable. Most consultants in the developed countries do of course keep this PI insurance policy continuously running.

- Contractor's All Risks Policy: This policy covers loss or damage from what so ever cause to the contract works or materials whilst on the contract site(s) and in use in connection with the contract during the performance of the contract and the period of maintenance. The FIDIC (Fédération Internals des Ingénieurs Conseils: International Federation of Consulting Engineers) conditions of contract require the Contractor to take out such a policy in the joint name of the client and the contractor (see cl. 20 and 21) [7]. The policy is "All Risk" and is therefore all inclusive, with the exception of what are called the "Excepted Risks" (meaning not accepted).
- 3. Contractors Third Party Liability Policy: This policy covers loss or damage to third party persons or property arising out of the construction or maintenance of the works. As the name indicates, third party means anyone who is not a part of the insurance contract. The FIDIC conditions of contract require the contractor to take out such a policy (see cl. 22 and 23) [7].

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4. Contractors Employers Liability Policy: This policy covers damages in respect of injuries to workmen in their employment, or employment of any sub-contractor. As this insurance cover is required by Statute Law for any employer in the developed countries, it is not therefore specified as required by the Conditions of Contract.

#### CONSTRUCTION INDUSTRY IN ETHIOPIA

Under the Ethiopian Federal System of government, it is the power and duty of the Ministry of Public Works and Urban Development to administer any construction contract undergoing in the country financed by the federal government. It is the same Ministry who is also responsible to register and issue licences and certificates of competence to those involved in the country's construction industry.

In Ethiopia, construction licence of contractors has four categories, namely: General Contractors (GC); Building Contractors (BC); Road Contractors (RC) and Specialised Contractors (SC). Depending on the human and material resource requirements each category is then sub-divided into various classes which will lead to determine the maximum cost of a project value they can bid for. For instance, General Contractor class 5, GC5, can bid for projects worth up to 5 million Birr whereas GC1 can take projects costing above 20 million Birr. Until very recently less than 15 GC1 contractors were registered in the Federal Ministry of Works and Urban Development. Due to insufficient capacity of local contracting firms, it became normal practice to offer multimillion Birr worth projects to foreign contractors. This fact indicates that some means has to be devised to raise the capacity of competent local contractors so that they can engage themselves in major construction undertakings, be it locally or at international level where possible. Merging of two or more contracting firms or joint venture deals can be considered among the possible ways of upgrading local contracting firms capacity.

Similar argument holds true for consulting firms as well. The Ministry divides consulting offices into four classes: Consulting Architects and Engineers; Consulting Architects; Consulting Engineers

General and Consulting Engineers - Specialised. Based on their resources, experience and other criteria, each type is then sub-divided into 5 categories. Consulting office services is yet to be developed in Ethiopia. The present picture of construction consulting services show that, with the exceptions of handful private and government or semi-government institutions, most of them are new to the business. It is hoped that with time successful consultants would prove their competence in the construction industry.

It is to be noted that the requirements of the Ministry for licensing neither contractors nor consultants do not include insurance as a criteria. Bearing this in mind, an attempt has been made in this research work to assess whether the concept of insurance is understood in the Ethiopian construction sector by conducting a preliminary study in Addis Ababa.

#### METHODOLOGY

Questionnaires were designed and distributed to contracting and consulting firms of various classes. Copies of the questionnaires are included at the end. A randomly selected 18 contracting and 12 consulting firms were included in the study. The intended number of contractors and consultants were more than was stated. Unfortunately, not all requested contractors and consultants were willing to respond to the questionnaires and to give their opinion on the subject matter.

In addition, the majority of insurance companies in Addis Ababa were approached and requested for information regarding the types of insurance policies they offer and their opinion about insurance policies and practices in Ethiopian construction sector. They were co-operative to share their experience and some of them showed keen interest to know the outcome of the study.

#### RESULTS

#### Consultants

Out of the 12 consultants involved in the study, 6 were Consulting Architects and Engineers, 3 were

Consulting Engineers and 3 were Practising Professional Architects. They were all privately owned and the majority of them were involved in numerous projects in the last 10 years. 17% of the respondents said that they have professional indemnity insurance and 42% of them had insurance policy other than PI insurance while 42% of the consultants do not have any insurance coverage to protect themselves. It has been understood from the study that performance and bid bond guarantees are

mostly used by the consultants as one of the criteria for selecting suitable contractor.

The variation of insurance policies bought by the consultants are summarised in Table 1. Table 2 and Table 3, indicate the types of insurance policies the consultants were using for the selection of contractors and the types of insurance policies recommended by consultants to contractors, respectively.

villential of the amount Table 1: Insurance policies bought by the consulting firms.

Insurance type Man Num	ber of consultants	Percentage [%]
Professional indemnity	It is the same . 2 n	he feder 7.61 vernment
Group personal accident	n 1 issue 1 n	8.3
Vehicle and equipment	w 1 sont of sone	
nderstood in the Ethyarty Third party del add mi bootstoba	u 2 vyteubni n	16.7
onducting a preluninary salid in Addis Aba	0 1	8.3
None	contractors has 6	10. 500000 41.7
Total	outractors (GC); 21	es name 001 jeneral Co

Table 2: Insurance policies required by the consultants to select contractor.

Insurance type	Number of consultants		Percentage [%]	
Bid Bond			is then sub001 ded into va	
renormance bond		2 A To Izon mu	Lead to det 001 inc the maxim	
Troicssional indentitiv		nce, General 1	the they can 6.8 for. For insta	
Insurance of work		ojects worth 1	r class 5. G 6.8 can bid for p	
Timu party		take projects 4	illion Birr E.EE cas GCI can	
insurance against accident to		very recently 1	limil Birr. Until	
WOLK HIGH			15 GCI contractors were reg	
Personal accidents		Development 1	hinistry of V.8.8 and Urban	
Group accident		contracting 8	nsufficient 62acity of local	

Table 3: Insurance policies recommended by the consultants to contractors.

nsurance policies	Insurance type	Number of consultants	Percentage [%]
on a non-	Bid bond	10 12	100
now the outcom	Performance bond	locally 21 at	100
INCUITO SILI WOLL	Third party	to over lo grigis	58.3
	Machinery and equipment	re deals 2m be	41.7
	Life insurance for work men	gnibi2squi lo s	16.7
	Personal accident	1	8.3
	Fire, electric, earthquake, etc.	1	8.3
	Property insurance	sulting fights as	8.3
	Group accident insurance	olmi 3 oillo gn	25

The study revealed that there is a consensus, at least theoretically, on the importance of insurance in construction undertakings and 60% of the consultants suggested the concerned authority to make insurance mandatory for parties involved in the construction industry. The reasons given by the consultants for not buying the PI insurance policy include: the policy is not very much known in Ethiopia; the government does not demand for it; the policy has never been exercised by insurance companies; clients do not demand for it and the PI insurance policy is expensive.

The study clearly indicated that the role of insurance principles in Ethiopian construction industry, even in consulting firms, is little understood. This situation calls for immediate attention by the concerned government bodies in preparing guidelines and enforcement procedures regarding

risk management and insurance policy in local construction undertakings. The consultants involved in the study have also pointed out that insurance companies should as well promote the importance of insurance coverage to all parties involved in construction industry, with special emphasis to contracting and consulting firms in a more organised and elaborated manner.

#### Contractors to slow and no nointgo riadi

Out of the 18 contractors included in the case study only 4 of them were building contractors while the rest were general contractors of different category. The general profile of the contractors with regards to their number of employees is given in Table 4 and the insurance policies bought by the contractors other than performance and bid bonds are given in Table 5.

Table 4: Number of employees in the contracting firms.

Number of employees	Number of contractors	Percentage [%]
below 100	r undertakings 8 Insurance	od m so16.7 mos
100-500	formance bond 8 design n	em in 4.44 mine ne
500-1000	to about 10% of 4	22.2
above 1000	опетияні 3	16.7
Total	spidto ne 18	100

Table 5: Insurance Policies bought by the contracting firms.

Engineers: Eth yollog annual Associations	Number of contractors	Percentage [%]
All risk builders risk insurance) bas amathrano	t there were cas4s where	adt betro22.2 god oz
Contractors equipment insurance	ance companies and	27.8 od
Burglary, robbery, theft insurance	se could not be stilled for	ictors arleffund the c
Fidelity bond	t is the author's opinion	ger pen7.61f time.
Workmen's compensation insurance	ontractor's claindon time	allure to \$3.301 studies
Motor vehicle insurance at venanthal moderatemos	ntractors to bull similar	discou 8,77 other or
Group life insurance monthly company and an arrangement of the company of the com	fore, contractors usually	nce po 6.6s. There
Contractors public liability and property	ot nigr2m tilong gniae	to off.flor incre
damage insurance		ensate for the expecte
Comprehensive general liability	-	nt insurantie policies.
Fire and lightning policy mogen vinoduA adT	5	27.7
firms in Ethiopia does not oo trabicoa lanoarel	2	ance codultnies
Life insurance are incences. The strains and incences	2	11.1

It has been found from the study that only 33% of the contracting firms were using insurance as a criteria for the selection of sub-contractors and 90% of them had at least one insurance policy, which is mainly Motor vehicle or Contractor's equipment policy.

For unknown reasons, nearly 40% of the contractors were not willing to share their experience or give their opinion on the role of insurance in the construction industry of Ethiopia. It can be generalised that they do not give attention and consider insurance as an important component of their construction business. The majority of the contractors, though they do not buy policies, do understand that construction work is a risky undertaking and insurance is a vital tool in covering or at least sharing the risk. They know also that there is a strong attachment between an insurance company and an insured right from the start of a project covering bid-bond. In this respect, contractors plant and machinery insurance policy gives them full confidence in their undertakings. This helped them in securing performance bond, which is most of the time equivalent to about 10% of the project cost.

One important issue raised by some of the contractors is that, when problem arises, insurance companies are not efficient and do not give immediate attention and assistance to contractors. It has also been reported that there were cases where dispute between insurance companies and contractors arose and the case could not be settled for a longer period of time. It is the author's opinion that failure to administer contractor's claim on time could discourage other contractors to buy similar insurance policies. Therefore, contractors usually prefer to opt for increasing profit margin to compensate for the expected risks rather than buying relevant insurance policies.

#### Insurance companies

It has been found at the time of the study that, some insurance companies were not even aware of the existence of some construction related insurance policies, such as Professional Indemnity insurance policy. It is apparent from the study that Bid and Performance Bond guarantees, and Motor Vehicle insurance policies cover the large share of contractors involvement in the insurance market. It is worth pointing that insurance companies should study the need for different policies in construction industries and should work hard to popularise relevant policies among parties in construction industries. The checklist, included at the end, contain the most important insurance coverage, which are typical of the construction industry [4]. However, in the long list of possible insurance coverage, not every policy is applicable to any one construction project.

Like in many developed countries, it may as well be advisable to establish specialist insurance consulting firms, who could handle all types of construction demands: such as structural and architectural plumbing, electrical works, conditioning, etc. For instance, Independent Insurance Management Consultants, who are serving design professionals and the construction industry, are available in the USA. Their goal is to provide insurance coverage and quality service to clients in an ethical and professional atmosphere. It is also essential for the local insurance companies to work closely with construction related professional associations, such as, Ethiopian Associations of Civil Engineers: Ethiopian Architects Associations and Consultants and Contractors Associations.

#### DISCUSSIONS

It is generally understood that insurance in the construction industry is taken out for the following major reasons: compulsion by legislation; required by the contract; self protection and requirements by financiers.

The Authority responsible for licensing construction firms in Ethiopia does not consider insurance as a criteria for issuing licences. This being the case, construction firms, both consulting and contracting firms, are not fully aware of insurance and they do not want to purchase policies unless they are forced to by legislation or contract conditions. Construction firms included in the study conformed this fact by saying that the concerned government authority should make insurance mandatory.

The local conditions of contract provided by BaTCoDA requires contractors to take responsibility for the care of works from the commencement day of the project to its completion. This means, contractors are required to buy relevant insurance policies after proper risk assessments have been made. However, the practice in Ethiopian construction industry is far from this. Most of the contractual agreement between client and consultant; client and contractor; contractor and sub-contractors do not require adequate insurance cover.

Consultants are liable for any damage that could arise due to their failure in design works. They should be insured or indemnified by insurance should claims arise against their work for professional duty (self protection). Unfortunately, most consulting firms are not willing to shoulder this responsibility and are not ready to buy Professional Indemnity insurance policy. Some of them even consider insurance as a redundant act and not as a part and parcel of their business. In the Ethiopian context, contractors are required to have at least a Performance Bond: Though lasts usually for only 1 year, contractors performance bond acts primarily for the protection of the owner to check whether his structure is built in accordance with the terms of the contract. We stow order a smill antibodies of the antibodies of the smill anti

Since most of the time clients do not have the proper knowledge of insurance they do not ask for adequate insurance coverage from the construction firms they select for their projects. Clients should keep in mind that it is absolutely essential to check for sufficient insurance coverage of the professionals involved in their project, in case they have to be indemnified. There were numerous cases world wide where consultants and/or mainly contractors have no money to pay during indemnity. Consultants, who act on behalf of clients are responsible to help their clients by giving them technical and managerial assistance. It has now become normal, especially in the developed world, to appoint Management

Consultants, who act on behalf of the client and help in selecting competent consultant and contractor, and administer the project without involving themselves directly in the design and construction works.

The above points reveal that the major parties in the construction industry, i.e. clients, consultants; contractors, concerned local and federal government authorities; law makers, financiers, etc. share responsibility for the non-existence of appropriate insurance guidelines in the construction sector of the nation. Moreover, systematic efforts have to be made by insurance companies to advertise and impress upon the public and the concerned parties on the need for a relevant insurance cover in the construction industry.

#### CONCLUSIONS

It has become clear that the need for suitable insurance policy is, therefore, unquestionable to satisfy the interest of the client; to achieve the required quality and standard; to provide safety of the workers and the general public during and after construction, and for proper utilisation of the nations resource. However, the results of the study indicate that most of the construction firms are making their business with no or without adequate insurance coverage. Some of the reasons for not having the required insurance policies are summarised as follows:

- lack of proper understanding on the importance of relevant insurance policies by construction firms and their clients; law makers; legal professionals and the society in general.
- a tendency to underestimate the risks associated with construction projects by all parties involved in a construction project.
- construction firms are not required by their clients/consultants or by the concerned authority to provide adequate insurance coverage.

- 4. most construction firms do not have a well organised management system who can evaluate the risk involved in a particular project.
- contractors are reserved to buy insurance policy(ies) unless they are required to procure one or more policies.
- 6. some important policies, like the Professional Indemnity insurance policy, are not understood by the society in general, by designers/consultants and even by some insurance companies in particular.
- 7. premiums of some insurance policies are very expensive.
- 8. insurance companies are not efficient in responding to clients claims.

#### of sidemon RECOMMENDATIONS

The paper is believed to stimulate public interest and calls for detailed investigation in the area of insurance in Ethiopian construction sector which was not given adequate emphasis nation wide. Based on the results of the study, the following recommendations are made to ensure a better appreciation for the risks associated with the construction of civil works:

- 1. prior to finalisation of tender documents, clients should appoint 'duly qualified advisers to check the procurement of relevant insurance policies as the condition of award of a tender.
- 2. insurance companies must find ways to demonstrate more clearly to clients and buyers the importance of various insurance policies.
- 3. efforts should be made to inform members of the construction industry about matters of liability and insurance.
- all parties in a construction project should accept that some risk is attached in their activity.

- 5. as usually done in the developed world, local financing organisations, before giving funds for construction activities should make sure that the designers and contractors had adequate insurance coverage.
- 6. competent and independent controlling mechanism should be established by the concerned authority to protect the interest of the client, the public and preserve the nations resource.
- the duty and functions of consultant and contractors in realising the interest of the client should be properly defined.
- 8. the relationship between client and consultant; client and contractor, consultant and contractor; contractor and sub-contractors should be clearly understood.
- professional associations should play a leading role in protecting the profession and increasing awareness of the professional ethics. This may include, for instance, recognising the best design and construction projects; organising seminars on relevant topics; etc.

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#### Appendix A

#### A-1. Important checklist of construction insurance coverage [4].

Pritchard, Ed., Princeton University Press,

#### A. Property insurance on project

- 1. All-risk builder's risk insurance
- penno lo anombre 2. Builder's risk fire insurance
  - 3. Earthquake insurance
    - 4. Bridge insurance
- Clouds A. Clouds Contraction Contracting Insurance and machinery insurance (of patients) to an 5. Steam boiler and machinery insurance (of patients) to an 5. Steam boiler and machinery insurance (of patients) to an of the patients of the
  - 6. Installation floater policy

### B. Property insurance on Contractor's own property bing A stoplory notativities gaigened [8]

- Processes and Procedures, ILO Geneva, 1 gniblind nwo s'rottoro on contractor's own building 1.
- 2. Contractor's equipment insurance
- 3. Motor truck cargo policy
- 4. Transportation floater
- 5. Burglary, robbery, and theft insurance
- 6. Fidelity bond
- 7. Dishonesty, destruction, and disappearance policy
- 8. Valuable papers destruction insurance

#### C. Liability insurance

- 1. Employer's liability insurance
- 2. Contractor's public liability and property damage insurance
- 3. Contractor's protective public and property damage liability insurance
- 4. Contractor's liability insurance
- 5. Owner's protective liability insurance
- 6. Completed operations liability insurance

#### D. Employee insurance

- 1. Workmen's compensation insurance
- 2. Old-age, survivors and disability insurance
- 3. Unemployment insurance
- 4. Disability insurance

#### E. Motor vehicle insurance

#### F. Business, Accident and Life insurance

- Business interruption insurance
- 2. Sole proprietorship insurance
- 3. Accident insurance on partners or key men
- 4. Life insurance on partners or key men
- 5. Group life insurance
- 6. Group hospitalisation insurance

## Abebe Dinku

## A-2 Questionnaire to the Contracting firms

Instruct	ion:
	You are not obliged to answer questions which you do not want to. You are kindly requested to complete the questionnaire as soon as possible. Tick in the box whichever is appropriate and write the required information in the open spaces provided.
1.	Are you a general contractor? Yes % No %
2. 3. dowg	Are you a building contractor? Yes % No %.  What is your grade?
3.	If any other please specify
	Yes % No %
4.	What is your present capital?
5.	How old is the age of your firm? (If possible write the time of establishment.)
6.	Do you require insurance policy as a criterion for selection of sub-contractors for a project?
7.	Yes % No % What is the number of employees in your firm?
8.	What are the numbers of construction equipment's you have?
	(please specify the type and number) and sometiment to slot oil galanconou and appropriate the specify the type and number)
	a
	b
	c
	d
9.	How many projects have you under taken in the last 10 years?
10.	Do you have any insurance? Yes % No %
	If your answer is yes, please list them with the corresponding premiums you are paying.
	a.
	b
	c
	d.
	If your answer is no, please list your reasons for not being insured

	Did y	our firm have					% No	, ,	
	If you	r answer is ye	s, what was it	s extent? (if	possible in n	nonitory i	terms)		
	to cor	andly requests	to. You are	do not want	is which you	question	to answer	ebliged i	Уон аге по
	And h	now did you co	mpensate the	damages yo	ou incurred?	possible. :s provide	soon as p en space	onnaire as n in the op	the questioning information
				,	8 % No %			general co	
		re any insuran the reason th				an insurai	nce comp	oany but yo	ou failed to p
		Y	es % No %	6					
	If you	r answer is ye	s, please list t	hem.					
	a.		establishment.		ossible write	m? (If po	f your fur	s the age of	
	b.	Ci-t <del>ainan a sait</del>		TO NAME OF					
	b. c.	for a project?	ab-contractor	s to nomosis	nerion for se	су аз а сі			
		for a project?	пр-сыпизистол		nur firm?	ov ni 255y	of emplo	es % Ni	
	c. d.	is your opinio		you have?	our firm?	yees in ye struction	o % of emplores	es % No the number	
	c. d.			you have?	our firm?	yees in ye struction	o % of emplores	es % No the number	
	c. d.			you have?	our firm?	yees in ye struction	o % of emplores	es % No the number	
	c. d.	is your opinio		you have? i to slor sht	equipment's  I ni sonarusan  en in the las	ihe constr	ur noitou	gnikatrabn	What are What are side of the
ank	c. d. What	is your opinio	n concerning	you have? i to slor sht	equipment's  I ni sonarusan  en in the las	ihe constr	ur noitou	gnikatrabn	What are What are a comparate of the com
	c. d. What	is your opinio	n concerning	you have? i to slor sht	equipment's  I ni sonarusan  en in the las	ihe constr	ur noitou	gnikatrabn	What are What are a comparate of the com
	c. d. What	is your opinio	n concerning	you have? i to slor sht	equipment's  I ni sonarusan  en in the las	ihe constr	ur noitou	gnikatrabn	What are What are a display and bare a display man Do you had a display and a display

## A-3 Questionnaire to the Consulting firms

#### Instruction:

You are not obliged to answer questions which you do not want to. You are kindly requested to complete the questionnaire as soon as possible. Tick in the box whichever is appropriate and write the required information in the open spaces provided.

you have any other insurance Yes % No — Our answer is yes, what are the
sour answer is yes, what are the
sour answer is yes, what are the
sour answer is yes, what are the
sour answer is yes, what are the
our answer is no, please write
our answer is no, piease write
our answer is no, please write
our answer is no, please write
contractors for a project?
ur due to the failure of the con
at types of insurance policies de
at is your opt <del>men concenting in</del>

-	is yes, who was responsible & how did you handle the damage?
	e not obliged to answer questions which you do not want to. You are kn
iale and write	ation in the open spaces provided.
	rofessional Indemnity Insurance? Yes % No % please write the reason for not purchasing this policy?
-	
	ny other insurance policy bother than the above mentioned above? The No % Sovia nov appropriate and provide the source and provide the source of the source and provide the source of th
If your answer i	is yes, what are they?
b	
C	
d.  If your answer i	is no, please write the reason/s for not purchasing insurance policies?
130901	equire insurance policy as a criterion for selection of contractors for a re-
e of the contract	Yes % No % newer is no, what with you do should an accident occur due to the failure
	nsurance policies do you recommend for contractors to have?
a b	
d	INVER IS YES, please list
	pinion concerning the role of insurance in construction undertakings in l
-	