

The Use of International Construction Contracts in Developing Economies: The Case of Lao PDR

S O OGUNLANA and M SYSAVATH

School of Civil Engineering, Asian Institute of Technology

PO Box 4 Klong Luang, Pathum Thani, 12120, Thailand

ogunlana@ait.ac.th

Abstract

Contract management is a significant issue in construction organizations, particularly for a complex project which deals with numerous parties. It is necessary for contract conditions to be clearly written in terms of contract language, fairness of clauses and clear definition of roles and responsibilities of parties. Common problems occur in the construction industries in many developing countries because of unclear contract conditions. Contracts are often prepared with emphasis on owner's rights and contractor's obligations. This leads to disputes, contract termination, project delays and cost overruns.

The Lao construction industry has grown during the last decade. Many infrastructure development projects are on-going through loans and grant programs. The Ministry of Communication Transport Post and Construction is the main agent with the largest funds and is responsible for road implementation throughout the country. Major problems arise due to the shortage of knowledgeable personnel to control and monitor projects, especially at the management and engineering levels. A study of the contractual practices and procurement management in the Ministry highlights some key elements needing recommendations related to contractual practices which include (1) contractors inability to fully understand contract documents; (2) laxity in enforcement of contract conditions; (3) misunderstanding of the roles of consultants; and (4) unfair contract clauses.

Key words: *Contracts, contract management, consultants, contractors, project performance.*

INTRODUCTION

A project can be considered successful if the product is delivered at the right time, at the appropriate price and quality, and provides the client with a high level of satisfaction (Barclay, 1994). Generally, construction accounts for up to 10% of the gross national product (GNP) of a country. Any improvement in the efficiency of the process has the potential for large cost savings. It has been estimated, for example, that selection of more efficient contract arrangements could reduce project costs by an average of 5% (Gordon, 1994).

Many contractual methods have been developed on how to choose the best approach to fit the owner's needs. In developing countries, where budgets are limited, owners face many financial constraints, shortages of material and lack of skilled personnel to run projects, particularly for infrastructure development. Large projects in the formal sector are usually funded through loans and grants from international agencies such as the World Bank, the Asian Development Bank and the United Nations (Jaselskis, 1998). This situation requires the host country to manage the funds for project implementation efficiently. Borrowers have to operate projects according to donors/lenders requirements. However, donors/lenders are getting more involved in project execution to ensure that money is used effectively.

Many problems arise in the course of a project due to unclear roles and responsibilities within construction teams. Lines of communication are often not well defined and the design teams are sometimes not aware of the social and economic background in the contractual arrangement. It has been found that in developing countries, procurement and contracting procedures often fail to ensure fair, competitive business practices. Contracts are often one-sided, expressing the rights of the owner and the obligations of the contractor without compensation to the latter if the owner defaults. Such procedures and rules lead to delayed payments and fail to compensate the contractor for escalation in costs for delay. Contract difficulties as well as cost and time overruns, can frequently be traced to such problems. Contract documents often are also excessively complex for the job to be done and sometimes inhibit participation in tenders by domestic contractors. Inexperienced and excessively rigid contract supervision further adds to the problem (World Bank, 1984).

During the last decade, the Lao government has increasingly mobilized its funds for infrastructure development, especially for transportation. Given the geographical constraint, the government is attempting to change Lao from a “land locked” to a “land linked” country. Lao occupies a central position in the regional transport network of Indochina as well as its neighbors. Many road and bridge construction projects are being implemented and airports are being upgraded. These projects are executed under different sources of fund given to the relevant ministries (EAR, 1998; PIP, 1994).

In Laos, the construction industry is becoming more aware of the need for improved contractual management in order to improve collaboration and coordination among local governments and the international agencies that provide funds. This paper investigates problems of contract management in Laos. The investigation focuses on contract documents, procurement practices, the role of construction teams and the ability of local contractors to understand contract conditions. The output illustrates some of the factors that need to be considered in contract conditions during the design and construction stage. Managing contracts in an efficient manner to meet the objectives of the project sponsor is a major challenge facing construction industry in developing countries

The principal aim of an owner or client on initiating a construction project is to acquire a sound finished project at a minimum price and with low maintenance. Most clients do not have the competence to undertake this on their own; hence they delegate the responsibility of execution to a contractor with the appropriate competence. Thus a contract is entered into between the client and the contractor because the client wishes to transfer responsibility for the construction of the project. Along with this transfer is also the transfer of certain financial risks arising therefrom. All tendering procedures and contractual arrangement are normally aimed at selecting the most suitable contractor for a project and securing from him a suitable offer and using this as a basis for an agreement for execution of the project (Aniekwu and Okpala, 1987). Whatever type of contract is adopted, mutual trust and confidence between parties involved is necessary in order to make the contract work effectively. Ashworth (1996) stated that the choice of a particular method of contract procurement for a construction project involves identifying employer objectives and balancing these with the procurement methods available in taking into account the owner's consideration.

PROBLEMS IN CONTRACT MANAGEMENT

Construction work in many developing countries suffers from administrative and allocative inefficiencies. Because of a lack of sound framework of institutional and legal arrangements, especially those affecting public sector procurement, the industry is not shaped to respond quickly and efficiently to the client's needs (World Bank, 1984). Aniekwu and Okpala (1987) classified the range of problems encountered as either systemic (resulting from the application of systems not suitable to the environment) or structural (resulting from the inherent conditions and practices within the environment). The systemic components can be remedied by adjusting some contract provisions. On the other hand, in their view, the structural components can be remedied only by adjustments in the whole societal posture since they are intrinsically tied to the structure of the environment.

Some of the pitfalls in trying to manage projects effectively and maximize project performance are: problems associated with misunderstanding of contract documents, especially general and special conditions have tremendous impact on project performance. Cultural variations and differences in value systems present problems to foreign professionals working away from home (Enshassi, 1999).

Tutesigensi and Moodley (1999) found that construction contracts affect harmony and levels of profit in the construction industry. The positive contribution of conditions of contract to harmony and profit in the industry can degenerate into a dysfunctional one when one or both of the following are exhibited in the system: lack considerable understanding of the conditions of contract by at least one of the participants; and lack of trust and belief in the conditions of contracts by one or all of participants. Many standard contract conditions are 'imported'. They originate from variety of sources, having been designed for different social, cultural, political, legal and economic backgrounds. In using 'imported' conditions of contract, therefore, several parts of the jigsaw are clearly missing and the end result is less than optimal achievement (Tutesigensi and Moodley, 1999).

There has been an argument against the use of 'legal' language and calls for the use of plain English in drafting conditions of contract (Cutts and Maher, 1986). The basis of the argument is that the use of 'legal' language results in increased cost, distortion and oversight in the process of the so often necessary translation and retranslation (Tutesigensi and Moodley, 1999).

THE LAO STUDY

Primary data were derived from questionnaires and interviews conducted through government departments in Laos. The respondents were mainly professionals in the construction industry such as lender/donor representatives (n=12), contractors (n=15), government officers/engineers (n=9). Secondary data were obtained from various ministries in the form of documents, reports, rules and regulations, guidelines and procedures prepared by the government institutions and the consultants.

In order to achieve the objective of the study, the questionnaires were classified into two different types for donors/owners and contractors. The questions were structured according to the purpose of study. The questionnaires comprised open-ended and close-ended questions. The key target is to examine the existing situation, perceptions, feelings, attitudes, problems and difficulties of clients and contractors during contract management.

Forty questionnaires were sent to government ministries managing infrastructure projects, mainly the Ministry of Communication, Transport, Post and Construction (MCTPC). A total of 21 samples were returned (52.5 % return rate). Forty questionnaires were also sent to large companies, of which 15 were returned (37.5% response rate). The high return rate was achieved because some of the interviewees were contacted personally first before mailing. Nine government engineers were interviewed.

Data analysis and interpretation basically used statistical methods. The contractors were asked to indicate the importance of opinion via numerical scaling. A scale of 1 to 5 was used where 1 represented "not important" and 5 represented "very important". This measurement was then defined as relative index and expressed by the following formula:

$$\text{Relative Index} = \frac{\text{Total score}}{5(\text{Sample size})}$$

The index was used for comparison of the perceptions of contractors toward the project being implemented.

FUNDING FOR ROAD DEVELOPMENT IN LAOS

Most infrastructure developments in Lao are for road and bridge construction projects. These account for more than one-third of government investment including loans and grants. The largest funds are from the Asian Development Bank (ADB), the World Bank (WB), and the Japanese International Cooperation Agency (JICA). The Project Implementation Plan Preparation Study (1999) reported that Lao PDR is entering a period when the repayment of road loans alone is estimated to amount to US\$ 6 million in 2000 and this will increase to US\$ 12 million in 2008. The national road network, constructed or upgraded in the last 10 years is also moving into the later half of its life with the need for pavement renewal and rehabilitation already being apparent. In addition, pavement renewal will cost approximately US\$ 70000 per kilometer (100 kilometers for pavement rehabilitation will cost approximately US\$ 7 million). Loan programs are initiated through the Committee for Investment and Cooperation (CIC) and lender's representatives. The ADB being the agency providing the largest grant. The WB is the next largest fund provider to the MCTPC. The major work is national road improvement and maintenance. The project identification of WB loan is similar to the ADB loan, but project documentation and implementation has to follow WB procedures. The Government of Japan is the third largest fund provider for Lao infrastructure development, but most of their projects are undertaken by turnkey contracts and operated by Japanese contractors.

PREPARATION OF CONTRACT DOCUMENTATION

The MCTPC receives the largest funds from the government investment amongst the various ministries. The ADB and the WB provide funds for project implementation and some small piece of loans for Technical Assistance (TA) are given by other organizations such as Nordic Development Fund (NDF) and Swedish International Development Agency (SIDA). The role of Technical Assistance is to assist the project to prepare documentation and develop manuals, working papers and other technical matters within particular projects and day to day work closely with the project coordinator (OICD, 1999).

Under the Department of Roads (DoR) of the MCTPC, the Planning and Techniques Division is responsible for the maintenance of road inventory and general condition database which is based on data collected by the Department of Communication Transport Post and Construction (DCTPC) in the provinces as well as maintaining of a rolling maintenance investment plan. Other related duties include the preparation of Lao language specifications and manuals/guidelines, based on individual or number of English language based documents.

The Road Administration Division under the DoR, collects data for the planning for new roads and road maintenance works. The Division prepares contract documents under the oversight of the DCTPC. It also provides technical advice to the Provincial Maintenance Engineers (PME) in monitoring and auditing contracts (MCTPC, 1999).

ENGINEERING CONSULTANTS

For major projects under the MCTPC, either directly or as agreed with the aid donor, the Ministry appoints a professionally qualified and appropriately experienced firm of consulting engineers to conduct feasibility studies and to provide technical advice. In the past, the consultant firm was also appointed as the engineer to prepare tender documents, evaluate bids and supervise construction.

Two groups provide technical assistance for preparing bidding documents for projects under the MCTPC, viz. ADB team and WB consultants. The consultants develop guidelines and procedures for the Ministry and the projects. Another institution, the Communication Design and Research Institute (CDRI) has monopoly for works under government budget in conducting survey design and tender documents for the MCTPC. The institute was established as a state enterprise under the MCTPC. The ADB also has a long-

term project for the development of management systems for Division of Roads as well as to provide assistance on a range of road management issues (MCTPC, 1999).

GENERAL CONDITIONS OF CONTRACT

The general contract conditions being used in the Lao construction industry is the Model Contract Document (MCD) which includes a standard form of contract for different types and sizes of works. The basic forms adopted by the MCTPC are:

- Federation International Des Ingenieurs-conseils (FIDIC) for work let under International Competitive Bidding (ICB) procedures;
- The Lao standard contract (based on FIDIC, simplified and adapted for the Lao environment) for Local Competitive Bidding (LCB) procedure for works above US\$250,000; and
- The Lao alternative short form of standard contract for Local Competitive Bidding (LCB) procedure for small works below US\$250,000

CONTRACTUAL ORGANISATION AND CONTRACT TYPES

Presently, separate consultant firms are undertaking design and construction supervision. The MCTPC appoints a project manager who carries out day to day monitoring of project on behalf of the Ministry and who acts as the “Employer’s Representative”. The project manager is an important factor in the success of a project and the position is a full-time appointment for the “life” of the project.

All road and bridge construction and maintenance works were carried out through items rate contracts. This means that Bill of Quantity is used for payment throughout the road sector. However, there are some other choices of contract types such as *lump sum*, *cost reimbursement* and *turn-key* contract as recommended by consultants. Any type of contract can be used upon approval by the MCTPC.

TECHNICAL SPECIFICATION

So far there has been no standard specification for the Lao construction industry. Technical specifications are changing with time according to lender requirements. In the past, the Russian standard was adopted since most engineers graduated from Russia and the experts and consultants were Russians. This has now been replaced. At present, the standard being used under the MCTPC are the following: AASHTO Standard, ASTM Standard, British Standard (for Laboratory). Moreover, the Road Design Manual (MCTPC) was adopted for temporary use in June 1996, together with Standard Specification for Road and Bridge Works (second draft 1993).

Project characteristics

The projects surveyed comprised 14 road construction and one school building projects located in various provinces. The project values ranged from US\$ 4.02 million to US\$ 14.37 with a mean of US\$ 9.10 million, and contractors were both national and international firms. The duration of the projects ranged from 21 to 84 months with a mean of 40.7 months. Funding were from the ADB, the WB and other lender/donor agencies; the owners being the MCTPC (14 projects) and the Ministry of Education (one project).

Preparation of contract documents

Nearly half the owners for whom consultants prepared the contract documents had pre-qualification and relationship between the owner and the consultant. One-third had only owner and consultant relationship but without pre-qualification. Three of the projects used pre-qualification only and one project had a

consultant recommended by the lender. The large number of respondents where consultants were selected from pre-qualification and relationship with owner was due to the loan agreement between the owner and the lender/donor. There was a separate fund for technical assistance requiring that consultants be pre-qualified by lenders. The consultant also has to be acceptable to the Ministry. Donors/lenders insist on being involved in the selection of the consultant as a way of protecting their loans/donations.

Standard Contract Forms

The owners were asked to identify the standard contract conditions being used in their organizations. The majority of respondents (48%) used both Lao standard contracts and FIDIC (mixed). Because the majority of works were considered as international competitive bidding, the FIDIC form was the most widely used. However, some clauses needed to be adapted and simplified in order to conform to local laws and circumstances.

The analysis further indicated that second group (14%) of owners used the Lao standard contract. The Lao standard contract, namely Procurement and Contract Procedures with Pre-qualification Procedures and Evaluation Criteria, was developed by ADB consultants. The standard forms were prepared in accordance with Implementing Rules and Regulations on Government Procurement of Goods, Construction, Repaired and Services. This format is encouraged throughout the MCTPC

However, there are some projects that used the WB (14%) and ADB (5%) template for the contract documents preparation. In this case the conditions of particular application have to follow the ADB or WB formats. All projects use BoQs but for the majority (76%), unit price is the basis for payment. .

Contractual organisation

The contractual organization that owners used for project implementation is General Contractor. The owner engaged separate consultancy firm to prepare design and tender documents and another firm for construction supervision. Owners then hired the contractor to carry out the projects.

About 81% of owners chose the General Contractor due to government decisions. In the past, the Ministry engaged one firm to conduct survey design and construction supervision. Nowadays most projects are operated under separate design and construction supervision contracts. The interview revealed that the advantages of separate firms are to reduce unnecessary cost and increase transparency. However, there has been no study to determine which approach can reduce projects costs.

Only 9% of respondents selected contractual organization based on considerations for their own current capability. They confirmed that they lack personnel to run large projects. There are some engineers delegated by the Ministry as 'owner's representative' who work on site with the consultant construction supervisor in order to gain technical knowledge from the consultants. In some cases, the organization was recommended by lender (5%) or chosen due to financial constraints.

Contract type and language

The contractual payment methods being used and the contract documents are mostly written in English. As most of the projects surveyed were designated as international competitive bidding, there was the condition from the banks that the contract language be English.

The survey shows the level of perception of owner for the selection of contract type. A surprising number of owners indicated these decisions were made for contract type selection because of familiarity with the type of contract (17 cases) of which nearly half (8 cases) also had it recommended by the consultant. Consultants were engaged to assist the project but the owners had no idea about the choice of contractual payment.

Claims from contractors

Most projects surveyed were found to be behind schedule. The major problems were mistakes in drawings, some items of work not in accordance with specifications, and delays in acquisition of land. All the projects involved claims for time extensions and additional work was involved in 20 of the projects. Change orders were involved in four contracts while one encountered differing site condition problems.

Problems during Project Execution

Table 1 shows the problems the owners faced during project execution. Nearly all the clients criticized contractors for not understanding contract documents, machinery problems (old conditions, insufficient), and contractor capability.

Table 1: Problems during Project Execution (owner's perception)

Factor	Number of responses	Percentage (%)
Understanding contract documents	19	90
Capability	13	62
Machinery	11	52
Financial	9	43

Contractors' lack of financial capability and inability to convince banks to provide loans has meant that they have had little success in keeping projects on schedule. Other concerns were the lack of adjustment for Kip devaluation on locally funded projects, and lack of access to foreign exchange.

The contractors in Laos are from various countries such as Vietnam, China, Korea, Australia, Thailand, Singapore and Sweden. The local contractors are state enterprises. The contractors who get the most jobs are Vietnamese and Chinese contractors. The reason is that they tend to submit very low prices during the bidding phase. It is known that they bring nearly all their labor and management staff from their home countries and they may not have added investment and depreciation costs in their bids. Most of the equipment were brought from their home countries and are in very bad conditions, having been donated by the former Soviet Union.

Owners comments on contractual practices

More than a quarter of the clients confirmed that understanding of contract documents, quality management and supervision should be the major focus. Pre-qualification improvement and bidding evaluation were the next major factors that clients felt needed to be urgently considered. However, leaving quality control to a consultant firm was the third major comment. About 9% of respondents suggested that the contract documents need to be translated and the command lines and role of the MCTPC in contract management and relations with private consultants need to be clearly defined. And most of the rest were raised about improvements of laws and regulations in contract conditions, the price or cost adjustment should be clearly stated, encourage the local consultant to handle the project, improving payment procedure, and training in contract management. Table 2 details the comments of clients on the contractual practices in their organization.

Most of the working papers and guidelines developed by consultants (technical assistance) are written in English. This creates difficulties not only for the contractors in interpretation of contract documents but also for the government staff (engineers and project managers) who are monitoring contracts. Some respondents opined that the contract documents need to be translated. As seen in Table 2, the largest group of owners said that a major problem during project execution is the understanding of contract documents.

Quality management is an important problem too. There is no formalized quality assurance system and the quality control procedures in maintenance contracts do not always appear to function. The general shortage

of laboratories combined with the lack of exposure to a system in which work quality is specified and required means that quality control is not normally practiced. This also means that the Department of Road staffs have limited knowledge of quality control requirements, or even basic understanding of the technical/engineering principles that underpin the specified quality requirement. Some consultants surveyed believed that leaving the quality control to the consultant will make projects have better end products in terms of quality assurance. This is especially so in the provinces where the quality control was delegated to local engineers and some of on-going works are not satisfactory.

Regarding bid evaluation, the bidding committee responsible for contractor selection is mainly from various ministries such as Ministry of Finance, Committee for Investment and Cooperation, and Head of DoR. The evaluation is done on the basis of guidelines and procedures prepared by consultants. Financial capability, experience on the relevant work and technical qualification are the main factors evaluated. The consultant and engineer provides advise only on technical issues but the final decision on the award of contracts depends on the committees comprising high ranking officers in the ministries concerned.

As per government policy, with 'Decentralization' for most of the projects implemented in the provinces, technical and management issues are entrusted to the Department of Communication Transport Post and Construction (DCTPC) in the provinces where the project is located. The MCTPC merely arranges tender documents, guidelines and undertake some management tasks. The DCTPC implements bid evaluation, contract award and construction supervision. This is known as capacity building at the provincial. When a project begins, there are conflicts between the two units: the MCTPC and the DCTPC. Their roles and responsibilities are ambiguous. Oftentimes quality control does not meet the expectation since some provincial authorities are prepared to accept poor work.

Table 2: Owner's Comments on Contractual Practices

Factors	Number responses	of %
Law and regulation in contract condition	1	4.76
The Price or cost adjustment should be clearly defined	1	4.76
Encourage the separate local consultant to handle the project	1	4.76
Improvement of Payment Procedure	1	4.76
Training in contract management	1	4.76
Contract document need to be translated	2	9.52
Definition of command line and role of MCTPC in contract management/ using private consultants	2	9.52
Leave the quality control to the consultant	3	14.29
Pre-qualification Improvement/bidding evaluation	4	19.05
Understanding of contract document/Quality management/supervision	5	23.81

Training courses are often conducted during project implementation. There is a WB loan for short and long term training of MCTPC staff. The plan for training needs is prepared by the Personnel Department and the Organization Development Division. There were complaints that oftentimes the trainees are not the people directly responsible for work. As such, problems with technical and managerial knowledge still exist. Therefore, more focussed training is needed.

Contractor's views on factors affecting performance

A five-point Likert scale was used to rank contractors opinion regarding the factors affecting their performance on projects. The result on Table 3 shows that payment for completed work, price fluctuations and the management of design changes are the factors considered to be important. Contractors complained that they were not adequately compensated for design changes whilst owners argued that they were following the contracts signed.

A major surprise is the weak rating given to non-adherence to contract conditions to which two explanations are plausible. The first is that contract controls may be so strict that non-adherence is impossible. The second is that the contractors consider strict adherence to contract conditions as an obstacle to their effort. Discussions with owners and contractors confirmed that the later explanation is the reason for the low rating. Whilst donors and lenders complained that contract clauses are not strictly enforced by the ministries, contractors complained that clauses are not fair in light of the local situations.

Table 3: Perceived Level of Importance of Factors affecting Performance (by Contractors)

Factors	Number of responses, Scale 1 to 5					Relative Index	Rank
	1	2	3	4	5		
Financial and payment for completed work	0	3	4	3	5	0.73	1
Price fluctuation	1	1	5	3	5	0.73	1
Design changes	1	2	3	5	4	0.72	3
Material shortage	3	6	1	4	1	0.52	4
Non-adherence to condition of contract	10	3	2	0	0	0.29	5

Note: 5= very important; 4= important; 3= some importance; 2= minor importance; 1= not important

Difficulties faced by contractors

Contractors were asked to point out some of the difficulties they were facing. Understanding/interpretation of contract documents was the most important problem faced by contractors. They complained that tender documents are prepared in English. Oftentimes, it creates misunderstanding in interpretation of contract clauses. Consequently, rework is frequent, leading to further misunderstandings.

This is followed by financial difficulty and long process of payment. The Ministry of Finance (MoF) is responsible for disbursement of funds from project special account. Invoices of foreign component (lender funds) submitted by MCTPC are initially received at the Cabinet Office, MoF, where the document is registered before being sent to Disbursement Division of the Treasury Department (TD). The invoices are checked in detail and approved by the Director of Treasury Department. Once signed, the document is sent on to the Banque Pour le Commerce Exterieur Lao (BCEL) for payment into contractors accounts. Local fund invoices are initially checked by the Budget Department (after being registered at the Cabinet Office) before sending to the Investment Division of the Treasury Department for final approval and signature of the Director of the Treasury Department. Payments are then made to contractors' bank accounts. The process of payment is time consuming; combined with the instability of the local currency they make life intolerable for contractors. Although the agreement in the contract (FIDIC clause 60.10) states that 'the owner shall pay to the contractor interest at the rate stated in contract in the event of failure of the employer to make payment within time stated', in reality this is not the case. Contractors are not compensated for employer caused delays.

CONCLUSIONS

This paper has shown that the problems associated with contract management in Lao need urgent attention. The shortcomings of owners in contract monitoring and contract administration lead to many delays, poor quality and cost overruns. Although there are foreign consultants engaged to carry out construction supervision, yet problems still exist. The relevant roles and responsibilities of the consultants are not clearly stated and there are confusions on lines of command and communication.. There are guidelines, working papers, and standard bidding documents developed by consultants. These materials are not effectively utilized for project implementation. Many contractors are not capable in the contractual, financial and technical aspect. Various problems have been found based on the outcome of analysis and interviews. The problems are summarized as follows:

1. Contractors are not able to comprehend contract documents. They struggle with the interpretation of contract documents and are not skilled in contract administration.
2. Many local contractors were found not to have access to foreign exchange through their contracts. They have no financial capability to convince the banks of their ability to repay loans.
3. Some contractor's equipment were rather old and not sufficient to carry out projects.
4. Contract conditions are not strictly enforced especially the defects liability clause.
5. Roles and functions of consultants and the engineers who supervise projects are not clear in the Ministry though the standard contract form being used is the FIDIC. This matter creates a big problem for quality control of project performance.
6. Various contract clauses are neither fair nor conforming to the local circumstances, particularly for payment clause and price adjustment.

The contract documents need to be examined before the contract is signed. Particularly the payment, liquidated damage, cost adjustment, contract termination and delays clauses. The language of contracts should be both Lao and English to improve understanding and working relations. It is necessary for the Ministry to consult with the Technical Advisor on how to choose the appropriate contractual arrangements for example contract type and contractual organization to fit with their own capability. The payment process needs to be simplified. Special training courses on contract management and contract conditions should be organized for local contractors in order to improve their ability to execute international contracts. This will benefit all parties.

Finally, evidences from other previous researches (Aniekwu and Okpala, 1987; Enshassi, 1999; and Tutesigensi and Moodley, 1999) shows that the contract related problems identified in this paper are not unique to the Lao situation. Rather they are common problems in developing countries where foreign contract practices are introduced without due consideration for the local customs and practices. Therefore, there is an urgent need to carefully consider how to improve contract management practices in developing countries especially when foreign standards and contracts are being used.

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