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Timely Project delivery: a case study of Malawian educational projects

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ABSTRACT

Purpose of this paper: The completion of construction projects in a timely manner is often a critical factor and measure of project success. However, in many cases, delays plague the delivery of construction projects in many parts of the world. The purpose of the paper is to critically evaluate the performance of the UK-funded Education Sector Support Programme (ESSP) infrastructure projects in Malawi, with respect to timely completion.

Design/methodology/approach: The research uses a case study approach, which critically evaluates the extent of schedule overruns through the collation and analysis of secondary data from the portfolio of projects administered by Malawi's Education Infrastructure Management Unit (EIMU) between 2003 and 2008.

Findings: A significant number of the educational projects administered under the ESSP have been plagued by delays, and other project management and delivery problems. Out of 184 contracts administered between 2003 and 2008, less than a third of them achieved timely completion and yet the liquidated damages clause was only enforced in 29% of the 111 delayed projects, leaving contractors to complete at their own time. Furthermore, the mitigation measures put in place to prevent poor project performance do not seem to have the desired effect.

Research limitations/implications: The scope of the research is limited to the construction programme directly administered by the Education

Infrastructure Management Unit (EIMU), which only covers projects from the Education Sector in Malawi. In addition, no attempt was made, in this phase of the research, to explore the specific causes of delays. Doing so would have provided a contextual perspective to the issue of timely delivery.

Originality/Value: The paper contributes to the knowledge base on infrastructure project delivery in developing countries. The findings should be of interest to a wide range of stakeholders involved in the delivery of public projects including government departments, external funding organizations, non-governmental organizations, academics and practitioners in relevant fields.

Keywords: Aid, Delays, Developing Countries, DFID, Infrastructure, Malawi.

1.0 INTRODUCTION

The problem of delays in the construction industry is a global one (Sambasivan and Soon, 2007). As a result, the literature is replete with studies investigating delays in various countries worldwide, including Nigeria (Dlakwa and Culpin, 1990, Mansfield et al., 1994; Abinu and Jagboro, 2002), Saudi Arabia (Al-Khalil and Al-Grafly, 1999), Jordan (Sweis, et al, 2008), Zambia (Kaliba et al., 2009), Ghana (Fugar and Agyakwah-Baah, 2010), Thailand (Ogunlana et al., 1996), Malaysia (Sambasivan and Soon, 2007).

When delays occur on construction projects, they can have serious consequences. Sambasivan and Soon (2007) found the six main effects of delay on construction projects in Malaysia to be cost overruns, time overruns, disputes, arbitration, litigation, and total project abandonment.

All these effects of construction delays have the potential of adversely affecting a project's ability to achieve its objectives. As a result, the completion of construction projects in a timely manner is therefore almost always a critical measure of project success.

The scope of the research is limited to the construction programme directly involving the Educational Infrastructure Management Unit (EIMU). The size and scope of the programme administered by EIMU justifies its study. It is the largest in the Education Sector in Malawi, employing approximately 30 to 40 contractors annually to deliver a combined average output of 300–500 classrooms. Annually 5-6 Architectural consulting firms, (almost 30% of all such firms in Malawi), are engaged on ESSP projects.

The purpose of the paper is to critically evaluate the performance of these UK-funded projects under the Education Sector Support Programme (ESSP) in Malawi, with respect to timely completion. Over the years, there have been concerns regarding the performance of these projects. Such a

review is even more important at this time when the UK's foreign aid budget remains unchanged while British taxpayers are feeling the economic squeeze at home due to the various measures introduced by the government to reduce the country's huge national debt.

2.0 THE CHALLENGE OF TIMELY PROJECT DELIVERY

Due to the global nature of the challenge of delays in the delivery of construction projects, there is a vast amount of literature on the subject. A selection of literature is reviewed, focusing on studies conducted in a handful of sub-Saharan African countries. Such a review provides an excellent perspective of the extent of the problem of delays in other similar developing countries, together with the causes as well as mitigation measures. The choice of studies from other African countries provides a good basis for performance comparison because the conditions affecting the selected countries will be similar to those experienced in Malawi.

2.1 Delays in construction projects in Ghana

Frimpong *et al.* (2003) identified five factors, out of a list of 26, as the major causes of delays to projects in Ghana as: monthly payment difficulties to contractors, poor contract management, material procurement difficulties, poor technical performance and material price escalations. They recommend effective and efficient management of projects as the ultimate solution to time overruns.

More recently, Fugar and Agyakwah-Baah (2010) also reiterated that delays in construction projects are still endemic in Ghana. They investigated a total of 32 factors causing delays in construction projects, which the research participants (clients, consultants and contractors) ranked according to the factors' order of importance. Based on their survey, Fugar and Agyakwah-Baah (2010) found that the top ten factors associated with delays in construction projects in Ghana were:

- i. Delays in honouring payment certificates
- ii. Underestimation of the project costs
- iii. Underestimation of the project's complexity
- iv. Difficulties in accessing bank credit
- v. Poor supervision of the works on site
- vi. Underestimation of the time for completion of the projects by the contractors
- vii. Material shortages
- viii. Poor professional management
- ix. Fluctuation of prices / rising cost of materials
- x. Poor site management

In order to mitigate the effect of the common causes of delay, Fugar and Agyakwah-Baah (2010) recommended that clients should ensure that they have sufficient project funds, they make speedy payments for work, whilst contractors must have competent personnel for the project.

2.2 Delays in construction projects in Nigeria

Dlakwa and Culpin (1990) outlined the reasons for time overruns in public sector construction projects in Nigeria. These included late interim payments to contractors, deficiencies in the contractors' organizations, poor planning and scheduling, contractors' unrealistic tenders, unrealistic contract durations imposed by the client, additional work, unexpected natural or social events, inadequacy of site inspectors and shortage of qualified staff.

Mansfield *et al.* (1994) identified the four most important factors causing delays and cost overruns in Nigerian construction projects as, financing and payment for completed works, poor contract management, changes in site conditions, and shortage of materials. Other factors identified included inaccurate project estimation and price fluctuations.

More recently, Nwachukwu (2009) used a systems approach to analyze the effects of materials constraints to project management success in construction in Nigeria. The study concluded that the attitude of the client and the project management team towards materials management is very important because it has a marked effect on the achievement of the project goal. For instance, delays in the procurement of materials will negatively impact the construction programme and may result in delays and failure to achieve timely project delivery.

2.3 Delays in construction projects in South Africa

In South Africa, Bowen *et al.* (2002) examined the views of contractors and business professionals regarding the causes of delays in construction. Client-induced changes were found to contribute the most to time overruns on construction projects in South Africa.

Like Nwachukwu (2009), Ganesan and Theo (2005) also advocate a systems thinking approach to help minimize construction project failure in South Africa. Citing Hindle (1996), Ganesan and Theo (2005) argue that fragmentation of the building delivery process is by far the biggest single problem leading to project failure. Professionals and other stakeholders are encouraged to participate in projects with a big picture viewpoint rather than simply focusing on their own small part in the project. This way, projects are more likely to be more successful because of the emphasis on the wider project and its objectives.

Samuel (2008) examined six government projects in South Africa to determine the root causes of their failure. Poor project management was found to be the basic problem leading to contractors failing to complete construction projects on time and within budgets.

Similarly, Phaladi and Thwala (2009) also found management-related issues as major causes of poor project performance for the small and medium sized contractors in South Africa. Lack of effective management in the early stages of the projects, coupled with inadequate finance, lack of credit facilities from suppliers, inadequate skilled manpower, poor pricing and tendering, inadequate contract documentation skills, and generally lack of proper management training were the major factors contributing to contractors' failure to execute projects successfully.

In order to forestall the challenge of timely project delivery, Samuel (2008) recommends that project time management be a key priority for the contractors and that the appointment of a registered project manager for each contract should be a mandatory condition of tender.

2.4 Delays in construction projects in Swaziland

Amongst small and medium size contractors in Swaziland, Thwala and Mvubu (2008) found that factors such as financial constraints, relationships with suppliers, late payments by clients, lack of necessary capacity and competence to achieve success, were some of the key factors for unsatisfactory performance on construction projects. However, they are quick to point out that the problems facing the small and medium contractors are not unique to Swaziland.

2.5 Delays in construction projects in Uganda

A study of clients' performance in construction projects in Uganda (Alinatwe, 2008) found that failure to pay advance payment to contractors as provided for in the contract led to poor contractor cash flow leading to project delays. Out of the clients surveyed, 89% did not provide any bonus to the contractors as an incentive for timely completion and that more than 90% of the clients do not support training for the contractors. In addition, variation orders and delayed payments by client were also identified as causes of project delays.

2.6 Delays in construction projects in SADC & East Africa

Rwelamila (2002) comprehensively reviewed the problems affecting performance in the construction industries in the Southern Africa Development Community (SADC) region and East Africa. Citing several empirical studies, Rwelamila (2002) summarised the key problems negatively affecting performance in the stated construction industries as follows:

- Costly project delays due to division between design and construction,
- Lack of skilled labour and poor site supervision are two major problems influencing quality,
- Poor project time and cost performance,
- Inaccurate estimates of clients project financing,
- Variations issued without regards to original budget – affecting project cash flow,
- Lack of thorough briefs, skilful designs and specifications,
- Efficient site management lacking,
- Delay in payment of contractors,
- The culture to plan meticulously and commitment to controlling the project has not entrenched itself in the construction industry in Kenya, and
- Occurrence of variations – considered to be a reflection of incompetence in design, lack of application of constructability and poor project planning and control.

Other country-specific studies on project performance have been undertaken in Southern Africa. For instance, Adolwa (2002) evaluated an advance loan scheme put in place by the Botswana government to assist small building contractors with project mobilization. The study found that the scheme was not as successful as intended due to misuse of the loans. Adolwa recommended further training of the contractors as well as monitoring of their progress to ensure success.

In another country-specific study, Kaliba *et al.* (2009) investigated cost escalations and schedule delays in road construction projects in Zambia, which yielded a list of 14 major causes of delay. Starting with the highest ranked factor, Kaliba *et al.* (2009) reported: delayed payments, unduly protracted financial processes, financial difficulties, contract modification, economic problems, material procurement problems, changes in the drawings causing variations, staff problems, equipment unavailability, poor supervision, construction mistakes made by the contractor on site, poor coordination on site, specification changes and labour problems. Kaliba *et al.* (2009) recommend the use of efficient project management tools and practices as a major step to minimize the causes and effects of delays and cost overruns.

A summary of the causes of delays identified in the selected sub-Saharan African countries is shown in Table 1. The table shows the most commonly cited causes of delay in the studies reviewed in this paper.

| Table 1: Top 10 Causes of delays in selected sub-Saharan countries | Ghana | Nigeria | Uganda | South Africa | Swaziland | SADC & E. Africa | Botswana | Zambia |
|---|--------------|----------------|---------------|---------------------|------------------|-----------------------------|-----------------|---------------|
| Delayed Payments | X | X | X | X | X | X | X | X |
| Poor Project Planning | X | X | X | X | X | X | X | X |
| Poor Site Management | X | X | X | X | X | X | X | X |
| Poor or lack of communication between parties | X | X | X | X | X | X | X | X |
| Site conditions | X | X | X | X | X | X | | X |
| Shortages/delays in supply | X | X | | X | X | X | X | X |
| Labour supply | X | X | X | X | X | X | | X |
| Change orders (variations) | X | X | X | X | | X | X | X |
| Contractors' inadequate cash-flow | X | X | | X | X | X | | X |
| Underestimation of project costs | X | X | X | X | X | X | | |

As shown in Table 1, all the top 10 delay factors in the selected countries are primarily management issues. Rwelamila (2002) concluded that the lasting solution to the problems identified in the selected countries was for Construction Industries in Africa to modernize. However, a critical requirement for success would be for all the relevant stakeholders in the industry to be committed to such a transformation. Any solutions would therefore have to address the failure of project management which is a recurring theme in construction projects.

3.0 RESEARCH METHODOLOGY

The study investigated project performance on Malawi's ESSP projects using a case study approach in which secondary in-house client's project documentation were systematically reviewed, data collated and analysed. The study is limited to ESSP projects commissioned between 2003 and 2008. The secondary data reviewed over 180 project files to provide an overview of the projects undertaken during the stated period.

4.0 SECONDARY DATA ANALYSIS AND FINDINGS

4.1 Case study background

Malawi is a southern African landlocked country which has an estimated population of 16million and a per capita (PPP) GDP of \$900 (2010 est.). The country is very densely populated although nearly 80% of its population live in rural areas. Malawi is primarily agricultural-based while the economy depends on substantial economic assistance from the IMF, the World Bank, and individual donor nations. In 2006, the country received relief, having been classed as one of the Heavily Indebted Poor Countries (HIPC).

Prior to the advent of multiparty democracy in Malawi in 1994, about 40% of eligible children were enrolled in primary School. Subsequently, the new government introduced free primary education which resulted in enrolment increasing from 1.8m in 1993 to 2.8m in 1994 (GOVERNMENT OF MALAWI 2007). This increase in demand for primary education brought about challenges like shortage of teachers, inadequate text books insufficient classrooms and teachers' accommodation.

As Malawi's biggest bilateral donor, the UK government has committed itself to long term support. This assistance is provided through the UK government's Department for International Development (DFID).

"DFID is the largest donor in education and expects to continue to play a lead role. Support to date, has focused on building classrooms, curriculum reform (and new text books), teacher training, and strengthened accountability" (DFID-MALAWI, 2007: 28-29).

Under the new UK coalition government, DFID recently renewed its commitment to funding development initiatives, including secure schooling for 11 million children around the world. However, the government was careful to reassure the UK taxpayers that it would ensure that UK aid works better by focusing on a number of performance criteria including "getting value for money from every pound of aid we spend" (DIFD, 2011).

From 1995, DFID funded the construction of 130 new schools under the Primary Community Schools Project (PCoSP) and completion of 200

classroom blocks under the Primary Education Programme (PEP). Building on the successes of these programmes, DFID initiated the ESSP in 2001.

Table 2 shows that DFID is a major player in the provision of educational infrastructure in Malawi. Between 2004 and 2008, DFID funded the construction of nearly 60% of Malawi's classroom construction, compared to a mere 20% by the European Union's Micro-projects unit.

Table 2: Major organizations Funding Educational Infrastructure in Malawi

| NUMBER OF CLASSROOMS BUILT PER YEAR (Numbers of Houses in brackets) | | | | | | |
|--|------------------|----------------------|--------------------|--------------------|---------------------|-----------------------------|
| Organisation | Districts | 2004/05 | 2005/06 | 2006/07 | 2007/08 | Total |
| DFID/EIMU | 7 | 1,208 (73) | 476 (10) | 307 (48) | 544 (156) | 2,535 (287) |
| EU Micro-projects Unit | Nationwide | 276 (81) | 131 (41) | 131 (42) | 268 (67) | 806 (221) |
| MASAF | Nationwide | 170 | 170 | 180 | - | 520 |
| Clinton-Hunter Foundation | 4 | - | - | - | 125 | 125 |
| SCF- USAID | 4 | 33 | 33 | 33 | - | 99 |
| GOPA | Nationwide | 78 | - | - | - | 78 |
| UNICEF | 6 | - | - | - | 60 | 60 |
| UNDP | 1 | - | - | 48 | - | 48 |
| SCF | 1 | - | - | 14 | 14 | 28 |
| ICEIDA | 1 | 8 | - | - | - | 8 |
| | | | | | Total | 4307 (508) |

Source: EIMU Office – Used with permission

Currently, the Ministry of Education, Science and Technology (MOEST), through its implementation unit, EIMU, which became operational in January 2008 is responsible for the delivery and maintenance of

educational infrastructure. Through this arrangement, DFID has continued to fund educational construction projects in Malawi.

The main purpose of the research is to investigate the timeliness of the delivery of educational projects in Malawi's DFID-funded projects. The research is limited to studies on the annual Primary Schools Construction Programme, which is only one component of the ESSP scheme.

4.1 Procurement arrangements on ESSP Projects

The ESSP projects are typically procured using a traditional procurement model with Architectural consultancy firms employed as lead consultants or client's contract administrators. In order to promote capacity building within the local Malawian Construction Industry, indigenously owned construction firms, Architectural and Quantity Surveying consultancy firms have been used in the ESSP scheme.

Each year, approximately 30 to 40 contractors are engaged to deliver a combined output of 300 to 500 classrooms. For instance, in 2007-08 alone, a total of 44 projects were awarded with a combined value of 1.2 billion Malawi Kwacha (£5.5million).

Design and Scope of Works

Annually the MOEST determines the projects to be undertaken by its implementation unit (EIMU), according to existing priorities and needs. The construction projects are typically a combination of between 2 to 12 primarily classrooms and 1 to 4 teachers' houses. Occasionally, other facilities such as administration block may also be part of the projects. Each project is different in scope which is reflected in the contract duration ranging from 10-26weeks.

The buildings have standardised designs, generally constructed of reinforced concrete foundations, load bearing block wall and stabilized soil blocks, roof with timber trusses and parry concrete tiles, steel windows, steel doors and frames, plastered wall finishes internally and pointed externally.

The Contracts

The ESSP projects use a standard form of contract, the Malawi Government Standard Conditions of Contract (1984 Edition, Modified). Contractors are invited to tender on the basis of firm bills of quantities, although the earthworks and external works are normally subject to re-measurement.

Contractor selection

The open system of tendering is used but only pre-qualified contractors are eligible to tender for work under these DFID-sponsored ESSP projects. Contractors registered with the National Construction Industry Council (NCIC) are assessed on criteria such as financial standing, technical standing, past experience and qualification, and experience of key personnel. Despite the use of pre-qualification, which is aimed at ensuring that the selected contractors have the desired capacity, experience and expertise, the ESSP projects are still fraught with poor performance.

4.2 Contractor Performance on ESSP Projects

In 2003, DFID in partnership with the then Infrastructure Management Unit (IMU) started the annual primary school construction programme on a pilot basis in selected districts. One such district was Ntchisi, a small agricultural town located about 98km north of Malawi's capital city. One of the major challenges to emerge from the pilot phase was the failure by contractors to complete the pilot projects within the contract period. The Construction Advisor for IMU did not disguise his frustration concerning the performance of the projects during the pilot phase in project correspondence to one of the project consultants:

"The poor performance of these contractors has caused immense difficulties to this programme as we have never been able to evaluate the pilot schools before the start of the main construction programme. It has also led to a decline in the performance of most contractors in Ntchisi as they are not worried about the consequences of failing to meet their planned programmes as they see these contracts dragging on with no action by the consultant or client" (IMU 2004).

Although three of the projects involved were eventually terminated, the above raises a number of issues relating to project implementation. Clearly, the problem and impact of delays in project delivery were noticed as early as August 2004. However, the trend seems to have been permitted to continue for another four years with little or no real changes. ESSP projects have continued to suffer perennial failure with many of the contractors failing to deliver projects within the stipulated contract period.

Table 3 below provides case study data of the ESSP projects executed between 2003 and 2008 in Malawi.

Table 3: Project performance on ESSP Projects

| Year | Total No. of Projects | Completed within original time | Granted EOT | Completed within EOT | Late despite EOT | Late without EOT | All Late Projects |
|---------------|-----------------------|--------------------------------|------------------|----------------------|------------------|------------------|-------------------|
| 2003-04 | 17 | 4 (23%) | 13 (77%) | 2 (12%) | 11 (65%) | 0 | 11 (65%) |
| 2004-05 | 53 | 1 (2%) | 52 (98%) | 14 (26%) | 38 (72%) | 0 | 38 (72%) |
| 2005-06 | 41 | 10 (24%) | 30 (73%) | 11 (27%) | 19 (46%) | 1(3%) | 20 (49%) |
| 2006-07 | 29 | 11 (38%) | 16 (55%) | 2(7%) | 14 (48%) | 2 (7%) | 16 (55%) |
| 2007-08 | 44 | 7(16%) | 37(84%) | 9 (20%) | 28 (64%) | 0 | 28 (64%) |
| Totals | 184 | 33 (18%) | 148 (80%) | 38 (21%) | 110 (59%) | 3 (2 %) | 113 (61%) |

Out of all the ESSP projects reviewed, only a third (33%) were completed within the original contract duration. Owing to the nature of the delays, a significant number (80%) of the projects were granted extension of time (EOT), with some up to as much as 178weeks! Out of all the contracts granted extension of time, less than a third (21%) of them were completed within the extend period. A significant number of the projects were therefore delayed by up to 124 weeks. The performance of the contractors, in terms of timely completion, has clearly been mediocre. However, the failure by the client and their advisors (consultants) to enforce the conditions of contract also seems to be perpetuating the problem.

4.3 Mitigating Poor project Performance

Due to the poor performance of the contractors, the client instituted mitigation measures aimed at improving contractors' performance and enhancing timely project completion. These measures include payment of advances for mobilization and material procurement, bonus payments as an incentive for early completion, assistance to procure materials, and

waiver of damages. This section is an analysis of whether these measures have been effective or not.

4.3.1 Advance Payments

The standard form of contract used on all the ESSP projects has a provision for advance payments of 20% of the contract sum to be made to the contractor at the start of the project. The measure was introduced in 2001 to alleviate cashflow problems faced by many of the contractors involved in the ESSP projects.

Proponents of the issuing of advance payments to contractors argue that they are beneficial to the smooth running of projects as they help forestall delays by decreasing the contractor's financial burden during mobilisation, purchasing of essential materials and hiring of plant and equipment (Hussin and Omran, 2009). However, in spite of being a well-intended and useful facility, advance payments are often ineffective as a long-term measure for improved construction industry performance. In Botswana, Adolwa (2002) found that both the contractors and the body administering the advance mobilization loan to the contractors believe the cash advance facility is important and effective. However, the biggest factors negatively influencing the loan effectiveness was misuse of the money and general lack of management skills to effectively utilize it.

4.3.2 Bonus Payments for Early Completion

Another unique feature of the ESSP projects is the inclusion of a bonus clause in the conditions of contract. The clause entitles contractors to a bonus of 2% of the contract sum per week, for every week or part thereof that they complete the works before the date for completion, up to a limit of 10% of the contract sum. When projects are completed before the date for completion, consultants involved on the ESSP projects are also entitled to a bonus amounting to 0.25% of the contractor's bonus amount.

Advocates of incentive schemes argue that incentives such as bonus can incentivise more contractors to complete their projects before the date for completion. For instance, Assaf and Al-Hejji (2006) identified the unavailability of incentives to contractors who complete projects before the date for completion as one of the root causes for delays in the Saudi Arabia construction industry. However, the types of incentives were not identified in the Saudi Arabian study. Others like Odeh and Battaineh (2002) recommend the provision of training incentives to develop the human resource capacity in the construction industry in Jordan. The incentive, they say, could be by way of offering tax deductions on money spent on training.

Although this feature of the contract is inevitably popular amongst contractors and consultants, the case study data in Table 4 shows that only a very small percentage of the contractors actually benefit from it.

Table 4: Percentages of Bonus recipients

| Construction Period | Contracts awarded | Contracts with Bonus |
|----------------------------|--------------------------|-----------------------------|
| 2003–2004 | 17 | 2 (12%) |
| 2004–2005 | 53 | 12 (23%) |
| 2005–2006 | 41 | 12 (29%) |
| 2006–2007 | 29 | 9 (31%) |
| 2007–2008 | 44 | 4 (9) |
| Total | 184 | 39 (21%) |

Source: EIMU; used with permission

Inevitably, the actual contractors who managed to earn bonuses in each of the periods under consideration were large, well established construction companies. Since the ESSP scheme mainly employs small and medium size construction firms, it seems that the bonus facility has, so far, not been beneficial to them. This seems to defeat one of the core purposes of the bonus scheme, which was to help develop contractors' capacity. Arguably, the sums of money spent by the client in this manner may be better spent in others ways such as providing training to least performing contractors.

4.3.3 Assistance to Procure Materials

There is divided opinion from the various stakeholders as to whether the client should assist the contractors to procure materials. Contractors on ESSP projects may request the client for financial assistance to pay for materials directly to suppliers. In cases where a contractor is experiencing cash flow problems and has no credit facilities with suppliers, such a measure on the part of the client may be essential to ensure that progress of the works is not hindered. However, such measures may not be useful in developing financial prudence and long-term capacity of contractors. On the contrary, the result may be perpetual contractor dependence on clients and perpetual poor management finances and projects.

4.3.4 Waiving liquidated damages

Based on case study data, Table 5 below further highlights the extent of project delivery failure in the period under review, with specific emphasis on the enforcement of damages and the awarding of bonuses for early completion.

Table 5: Enforcement of liquidated damages and awarding of bonuses

| Year | Late projects | Damages applied | Damages waived | Terminated Contracts |
|---------------|---------------|-----------------|-----------------|----------------------|
| 2003-04 | 11 (65%) | 0 (0%) | 8 (73%) | 3 (27%) |
| 2004-05 | 38 (72%) | 16 (42%) | 22 (58%) | 0 (0%) |
| 2005-06 | 20 (49%) | 7 (35%) | 13 (65%) | 0 (0%) |
| 2006-07 | 15 (52%) | 7 (47%) | 8 (53%) | 0 (0%) |
| 2007-08 | 27 (61%) | 2 (7%) | 25 (93%) | 0 (0%) |
| Totals | 111 | 32 (29%) | 76 (68%) | 3 (3%) |

(Source: EIMU; used with permission)

Out of all the delayed projects, less than one-third (29%) were subject to liquidated damages, while more than two-thirds (68%) had the damages waived in spite of the projects being delivered late. The client's rationale for waiving the liquidated damages clause is to prevent further financial burden on the contractors. The argument is that a contractor who fails to complete a project within the contract duration may already be under financial difficulties due to cash-flow problems. As such, penalising them with liquidated damages would simply make the situation worse.

However, it can be argued that the client's approach to project management, in particular the failure to enforce contract conditions, may be contributing to perpetuating poor project performance on ESPP projects in Malawi. Such a 'generous' gesture of routinely waiving liquidated damages for delayed projects may be counterproductive for construction industry development in Malawi in the long run. Contractors must be aware that by signing a contract to execute work in a given period of time, they need to be responsible enough to fulfil that commitment. Failure to fulfil their commitment should result in enforcement of the relevant contractual provisions.

5.0 CONCLUSIONS

Although the problems experienced by Malawi's educational infrastructure projects may not be unique, the extent of delays and poor project management is cause for concern. The client's initiatives in instituting measures to assist contractors to complete projects within the stipulated contract period do not seem to be adequate or universally successful. In

fact, it can be argued that they may simply be perpetuating dependency and irresponsible behaviour on the part of some contractors.

While the use of citizen construction firms is commendable, capacity building must go beyond that to address fundamental issues of wider construction industry development. The role of vibrant built environment-related professional bodies and the National Construction Industry Council (NCIC) in raising standards in the Malawian Construction Industry is crucial, failure to which many parts of the industry will continue to consistently underperform. Structural changes may be required to modernise practice at industry level as recommended by Rwelamila (2002). Other areas that will deliver some gains include training and professional development for both contractors' personnel as well as consultants responsible for the supervision and implementation of these projects.

Significant improvements and prudence in contract management are required in Malawi, especially in the delivery of construction projects that are donor-funded. Public opinion in the UK is increasingly becoming fragile and divided regarding the government's consistent funding of overseas aid projects such as the ESSP scheme. If such schemes are not seen to be delivering value for UK taxpayers, this may put negative pressure on future financial commitment for overseas aid projects.

The paper serves as a platform for further research to identify and critically appraise the causes of delay, with a view to determine the most effective measures for mitigating them.

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