

## EFFECTS OF PLANNING ON THE PERFORMANCE BY LOCAL CONTRACTORS IN THE NAIROBI COUNTY, KENYA

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### **Abstract**

Contractors' performance has been associated with the high cost of construction in Kenya. Given that local contractors' undertake construction of many types, this paper assessed the factors that affect planning by local contractors. A study to highlight the factors affecting the planning of local contractors on construction projects within Nairobi County was set out. This will assist clients in the choice of right contractors to select for realising their projects. Simple random sampling technique was adopted for the study. In the study, out of sixty questionnaires administered to local contractors forty, representing 66.7%, were filled and returned. From the results obtained, it was found that the most suitable performance yardstick to ascertain whether a contractor has planned for execution of the works are the quality of work (48%), delivery of the project on time (29%), the productivity rate of the contractor (12%), and the project completion within estimated budget (11%). It was concluded that planning affects the quality of work resulting into majority of local contractors' not being awarded construction projects, while clients are not being influenced much by the budgetary estimate when considering effectiveness of contractor. It is therefore recommended that there is need to train local contractors on elementary construction planning techniques. It was further recommended that there is need to carry out more research on the same since the scenario covers a small portion of contractors' population.

**Key words:** Planning, performance, contractors, construction industry

### **1.0 Introduction**

Planning remains an elusive subject despite many studies over the years to examine the concept with a view to coming up with a coherent position. There have been evident attempts at improving our understanding and measurement of planning. Indeed, the concept has been widely researched and has attracted considerable attention and controversy. Attempts at devising a reliable measure of planning have not been controversy free. For instance, a case study of a bank by Argyris (1958) showed that the concept, planning, has attracted considerable attention and debate on how it might be satisfactorily measured. The incoherent view of the concept is apparent in contributions by Rousseau (1988) who observes that the distinction between the concepts: planning and performance, remains ill-defined. He points out that the two concepts have been used interchangeably, often to the neglect of the existing body of research on planning. Rousseau (1988) observes that the concept, planning, has been taken up in a variety of ways leading to a lack of boundaries differentiating what performance is from what it is not. Rousseau (1988). The construction industry is a key industry in the economy of any country worldwide. It is one of the biggest industries contributing about 10% of the Gross Domestic Product (GDP). Owing to the impact of this industry to the global economy and resources, it is prudent that activities within it be efficiently and effectively planned. However, the significance of planning in influencing is emphasized by Hempton (1973) who alludes to the fact that, what is important about performance is that it can arouse or suppress the motivational tendencies of individuals. He points out that performance tend to mediate between the task requirements and the needs of the individual and that changes in the properties could have profound and immediate effect on the motivational performance of all employees.

Hempton (1973) holds that organizational performance influences the motivation of members. He points out that the capacity to influence organisational performance is perhaps the most powerful leverage point in the entire management system. Time and cost overruns in the construction industry are serious problems which can be partly attributed to poor planning. Small contractors are largely local Kenyans who form companies mainly owned by individuals or family. They may be classified as only able to perform contracts with little monetary value of less than 10 million. Despite 47 years of independence, major construction activity in Kenya is dominated by international construction companies who under take major engineering and building construction projects funded by both the private and public sector. These large companies have access to finance, equipment, material, management and technical expertise which enable them to undertake large construction projects. On the other hand, local contractors compete for small construction projects within the town or city where they operate and rarely move out of the local area to expand their business in larger

towns. When there is a shortage of work, the large international contractors cover their overheads by competing with small contractors for small work – a phenomenon termed -“downwards plundering” (ILO, 1987:37).

## **1.1 Planning Problems Faced by Small Contractors**

### **1.1.1 Cash Flow**

Small contractors in developing countries are often the ones on the fringe of the construction industry and undertake work unwanted by the large contractors. Most of their work comprising construction, maintenance and refurbishment work is from the public sector. Consequently, they are likely to be greatly affected by the state of the country's economy because of, for example, changes in the government's expenditure policy (Ruddock, 1992:93). As most government agencies experience financial problems, there are delays of payments to contractors with a consequent adverse effect on the contractor's cash flow (Ofori, 1991). This then affects the operation of the contractor, ultimately hindering the projects from being delivered as required (Adam, 1997:445-55; Jannadi, 1997:33). Many small contractors also experience difficulties in obtaining money from financial institutions to finance their business due to the high levels of bankruptcy in the industry; hence the initial capital for the business must come from the contractor (Miles 1979:86). In addition, most small and medium contractors in developing countries have very limited funds as they are seldom able to offer the necessary fixed assets as collateral (Ofori, 1991:27) therefore operate on very tight budgets.

In Kenya, all public funded projects are let on lump sum contracts with funds only released to contractors for payment of work done. Many small contractors do not have credit arrangements with major building materials suppliers or financial institutions, and operate on a cash basis. Delays in payment therefore greatly affect their cash flow.

### **1.1.2 Contract Documentation**

Inappropriate contract documents have been identified as one of the most common problems affecting the operation of small contractors Ofori (1991:371-2). Payment for extra work is done after practically completing the project. This places a consequent strain on the contractors' cash flow.

### **1.1.3 Working Relationships**

Overall in Kenya most small indigenous contractors often do not want a bad working relationship with the client, given that this may jeopardise their chances of getting any further work. Clients are hard to find and easy to lose and a contractor who finishes a contract on time and with a good reputation will be one step ahead of his competitor when the next invitation to tender comes along (Miles, 1980:245). However, small contractors have been known to express disappointment with their working relationship with the client's representative - mainly because of the unsympathetic attitude to the contractor's problems regarding shortage of materials and the delay in payments.

### **1.1.4 Facilities and Equipment**

Given the size of their company, many small contractors that are owner managed and operated, run their work from their own residence. Without office equipment like computer and photocopying machines, urgent information or queries take time to reach the parties concerned.

### **1.1.5 Communication**

Communication in small firms is often good, although poor communication skills of the manager can be a problem (Fryer, 1985:65). In developing countries, there is often no means of communication between the workers on site and the contractor's office. Urgent site problems, therefore, cannot be solved immediately because the site workers cannot talk to their manager or owner. This may lead to information being given to the wrong person or the information being misinterpreted when relayed.

### **1.1.6 Cultural Impact**

'Wantokism2' is the common cultural problem in Kenya and is thought to lead to the downfall of small construction companies. Small contractors in Kenya are often culturally pressured to employ more of their relatives to maintain a relationship with the village. If the contractors decide otherwise and hire workers from outside the village they are alienated from the village (Stretton, 1984:140).

### **1.1.7 Construction Management Skills**

Planning in organizations and public policy is both the organizational process of creating and maintaining a plan; and the psychological process of thinking about the activities required to create a desired goal on some scale. As such, it is a fundamental skill in entrepreneurial behavior. An important, albeit often ignored aspect of planning, is the relationship it holds with forecasting. Deficiency in planning and management skills is said to be the greatest single problem for small-scale contractors generally (ILO, 1987:47). In developing countries, the local construction industry lacks the capacity and capability of undertaking large construction projects, resulting in the continual domination of expatriate construction companies in undertaking all major construction projects (Adam, 1997:95-108). Consequently, smaller companies find it hard to acquire experience in their type of project (Jannadi, 1997:33) leading to contractors with limited management and technical skills (Ofori, 1991:371-2). This affects their ability to acquire building materials, manage their workers, successfully bid for work (Stretton, 1984:34-52) and generally contributing to poor performance (Ofori, 1991:371-2).

### **1.1.8 Financial Management Skills**

One of the major problems facing any business enterprise is that of obtaining finance. This is a problem not merely of quantity but also of type. The situation is further compounded by legislation, dynamism of the economy, but fundamentally by the requirement to minimize costs. The construction industry comprises a wide variety of firms from the single person enterprise to the large multinational public company. The sources of capital available to any firm are quite numerous but public companies have a great variety of sources available for their use and the single person enterprise, the least variety. This therefore affects the small and medium contractors in terms of their cash flow at any one given time.

The common types of finance are Bank overdrafts, Bank loans, Trade creditors, Retained earnings, Shares, Short term loans and Debentures. Small contractors have very low financial reserves and use the profit from ongoing projects to finance their next project; hence a loss in one project ultimately leads to a cash flow problem and liquidation (Stretton, 1984:43). Most small contractors in Kenya are owner operated who also control the company financial matters. It is likely therefore, that project funds will sometimes be channeled into other personal matters which consequent financial strain to the projects. In addition, delays in contractor payment caused by the cumbersome process of making contractor payments in the public sector create financial problems for the contractor. Unless well managed, this delay is very damaging to contractors who are operating in a location remote from the client.

## **2.0 Research Methodology**

The study covered the construction sites situated in Westland's area of the Nairobi County where there is a lot of private construction going on. The sign posts put up indicate that majority of the contractors are small contractors under taking construction of domestic residential premises. Since the construction in Westland's area is a lot because the area is being converted from single dwelling units to multi-storey structures, and the work is under taken by individuals, I think this gave a bearing as to the planning carried out by small contractors, the population studied was the directors of the companies, the consultants of the various projects, supervisors, operatives and buyers to the proposed constructions because they had first hand information on the aspects to be studied.

A total of 60 respondents were targeted for this study. Purposive sampling technique was used to identify respondents for key players in planning. Purposive sampling technique is normally used for choosing people whose views are relevant to the issue (Jankoviez 2000). It was a sampling technique that was appropriate for the study in that it enabled the researcher select relevant respondents with appropriate information to benefit the study.

### **2.1 Data Analysis and Interpretation**

Questionnaire completion rate is the proportion of the sample that participated as intended in all the research procedures. In the study, out of 60 questionnaires administered 40(66.7%) filled in and returned. This questionnaire return rates was deemed adequate for the study. The study used both primary and secondary data. Kumar (2005) warns that when using secondary data, one needs to be careful of validity and reliability, personal bias and format of data. For the purpose of this research a number of resources were used to gather secondary data. A literature review was undertaken and a number of relevant sources uncovered. The sources

ranged from government statistics through publications, academic journals and websites. Other sources that were used are books and conference papers.

The primary method of data collection was gathered through questionnaires and semi-structured interviews. This method ensured that relevant data was collected for the specific research problem. However the danger was that there may be bias on respondents not answering the questions correctly thus giving untrue information. To enhance validity of the instrument, the questionnaires were given to two experts (my supervisors) for scrutiny and objective comments were used for amendment. In adytum pre testing was done to determine whether the questions were acceptable, answerable and well understood by the respondent. The reliability coefficient indicates the consistency of the score produced. The test retest method was used to assess the reliability of data.

According to Schindler *et al.*, (1998), data analysis involved reducing accumulative raw data to manageable size, developing summaries, looking for patterns and applying statistical techniques. Data analysis for this study was done both quantitatively and qualitatively. The Microsoft Excel programme was used for analysis. Some of the questionnaires were Yes/No response while others had set columns for priority (ordinal or nominal scales) all these were analyzed in table format.

## 2.2 The Demographic Information

Table 1: Age

FACTOR	FREQUENCY	PERCENTAGE
18-26	4	10
26-35	10	25
36-45	16	40
46 and above	10	25
TOTAL	40	100

Table 1 illustrates that the respondents who were between the ages of 18-26 were 4(10%). Those aged between 26 and 35 were 10 (25%). Those aged between 35 and 45 were 16(40%). And finally those aged 46 and above 10 (25%).

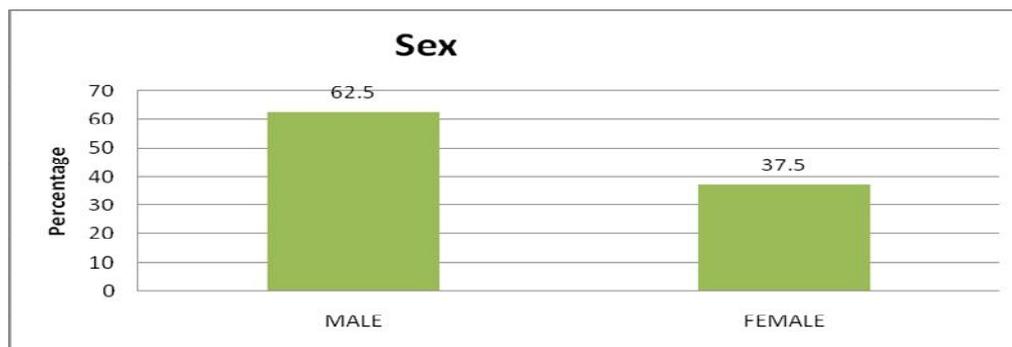


Figure 1: Sex

Figure 2 shows that majority of the respondents, 25(62.5%) who took part in the survey were male whereas 15(37.5%) were female.



Figure 2: Educational Level

When it came to the educational level of the respondents, majority of them had attained a college level of education, 17(42.5%). This was then followed by 12(30%) who had attained secondary level of education. This was closely followed by 11 (27.5%) who had attained university level of education.



Figure 3: Occupation

Figure 3 shows that majority of the respondents, 25(62.5%) who took part in the survey were self-employed whereas 15(37.5%) were employed.

### 2.3 Planning Factors

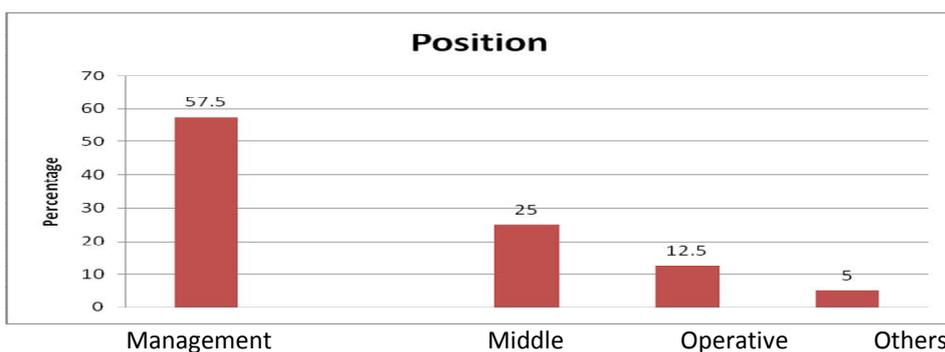


Figure 4: Position in organization

Figure 4 shows that 23(57.5%) of the respondents indicated Management. This was followed by 10(25%) that indicated middle. Another section of the respondents 5(12.5%) indicated operative. The above findings shows that there is a large number of respondents were drawn from management position.

## 2.4 Performance Factors

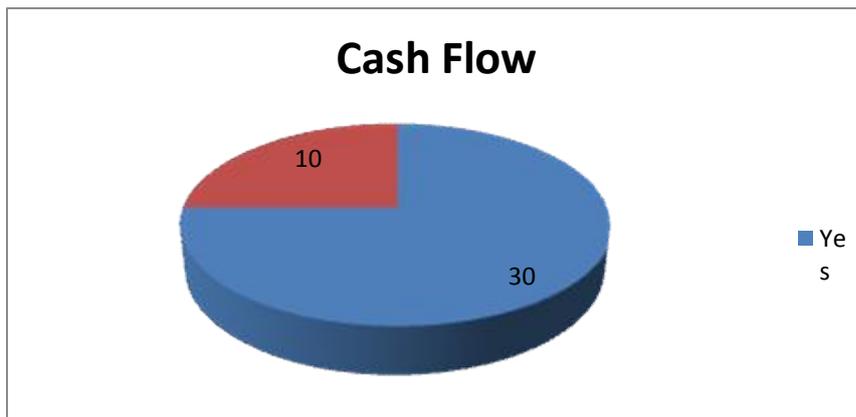


Figure 5: Cash flow

When asked to comment on cash flow the results were as follows 30(75%) indicated yes while 10(25%) indicated no. the author concluded that cash flow has got an influence on planning.

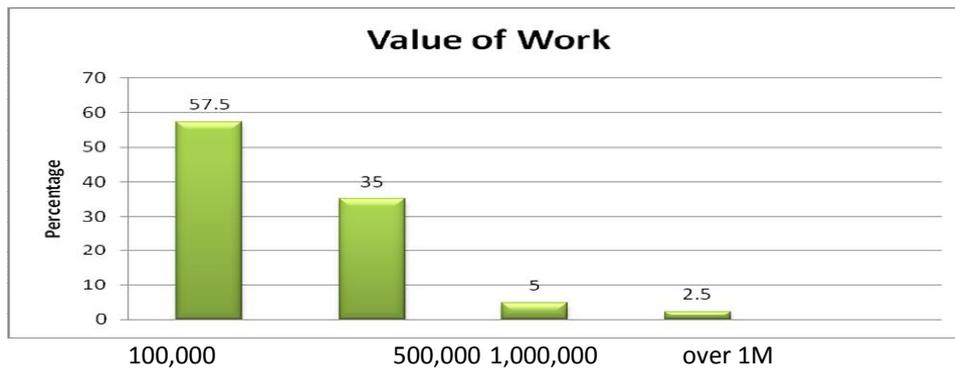


Figure 6: Value of work

According to the Figure 6, a great number of the respondents 23(57.5%) agreed 100,000. This was then followed by 14(35%) which indicated 500,000. Another section of the respondent indicated from 0.5m to 1m and the last indicated over 1 million.

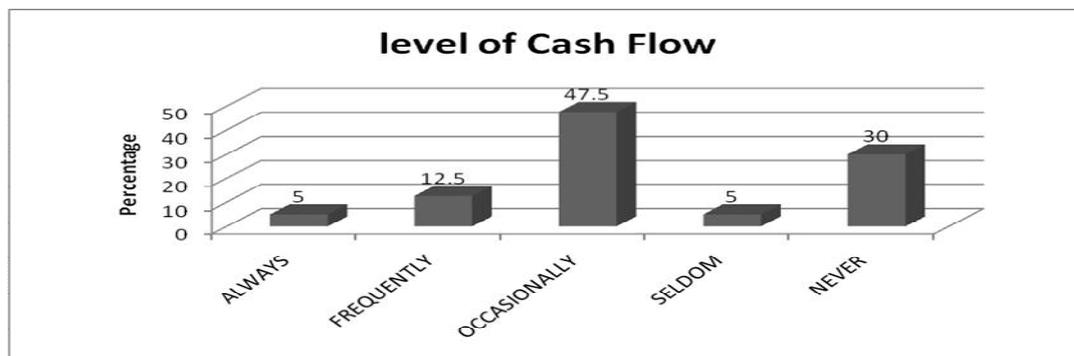


Figure 7: Level of cash flow

When it came level of Cash flow experience, 19(47.5%) indicated occasionally. Then, 12(30%) indicated never. This was followed by a section of respondents 5(12.5%) that indicated frequently. There was a tie between always and seldom at 2(5%).

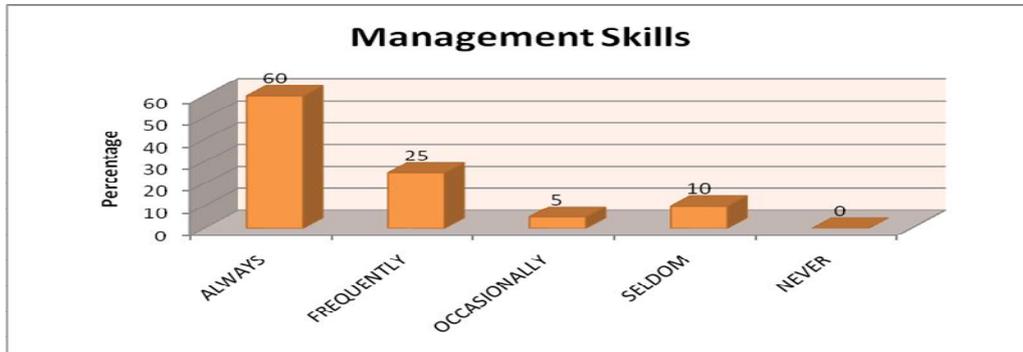


Figure 8: Level of management skills

When asked regarding level of management skills 24(60%) indicated always. Another section of the respondents 10(25%) indicated frequently and 4(10%) indicated seldom. The study concluded that they always experience management skills problems.

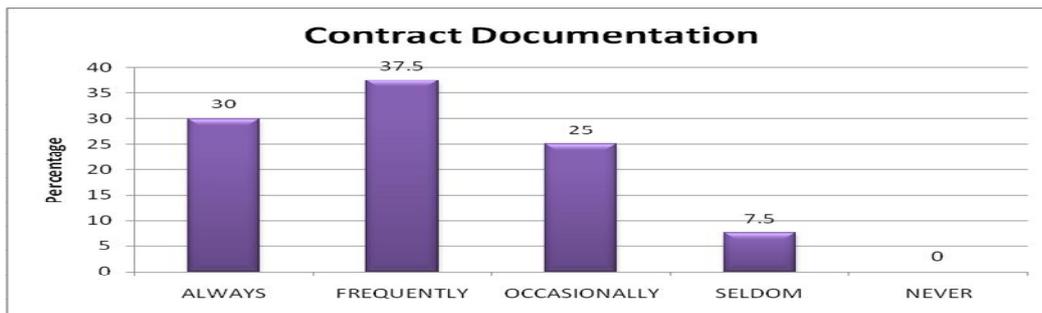


Figure 9: Level of sufficient contract documentation

The study indicated that 15(37.5%) agreed with frequently. This was then followed by 12(30%) who indicated always and 10(25%) who stated occasionally. The findings reveal that the level of contract documentation is frequently being felt.

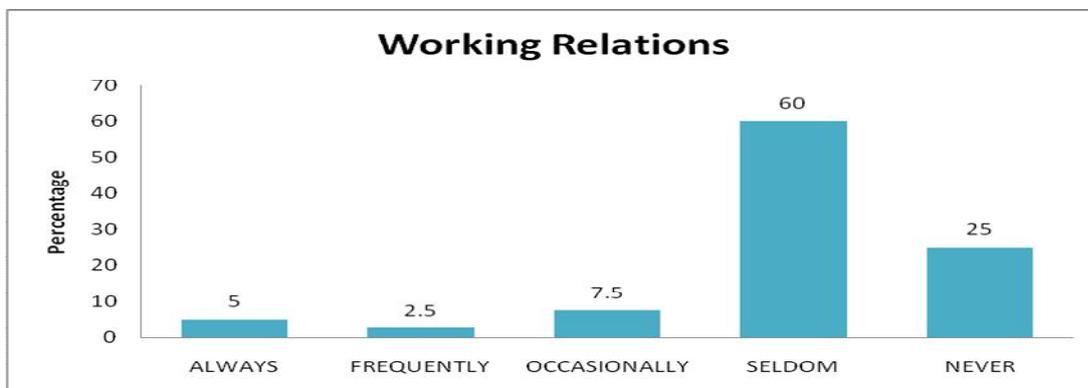


Figure 10: level of harmonious working relations

As per the level of harmonious working relations 24(60%) indicated seldom. This was distantly followed by 10(25%) who indicated never. The ones who indicated occasionally stood at 3(7.5%). The researcher concluded that the level of harmonious working relations is seldom.

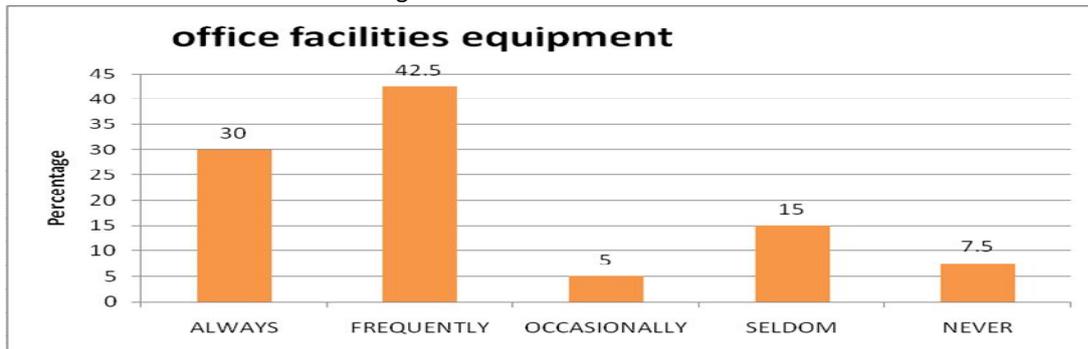


Figure 11: Level of office facilities equipment

According to Figure 11, 17(42.5%) of the respondents stated frequently. This was then followed by 12(30%) who indicated always. 6(15%) chose seldom while 7.5% indicated never. 5% indicated occasionally. This clearly shows that the level of office facilities and equipment is being felt frequently.

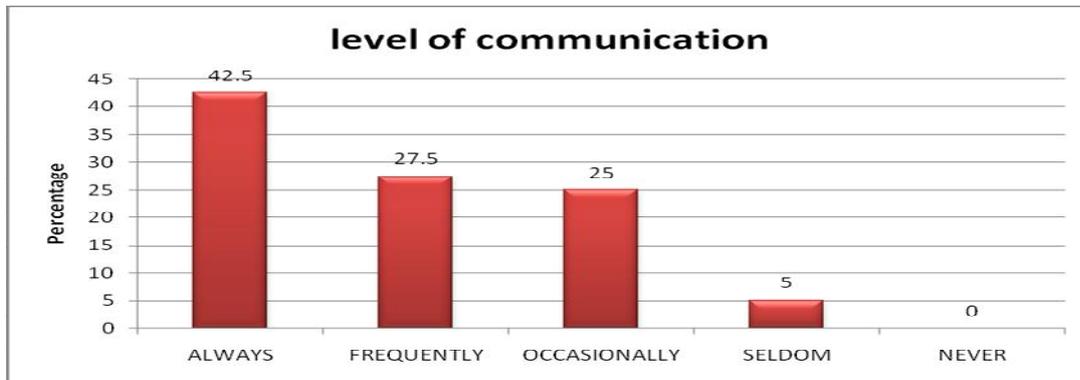


Figure 12: level of communication

When asked regarding level of communication, 17(42.5%) of the respondents indicated always. This was then followed by 11(27.5%) who stated frequently. Ten (25%) percent indicated occasionally while 2(5%) indicated seldom. It is clear that the use of communication within the firm is always being used.

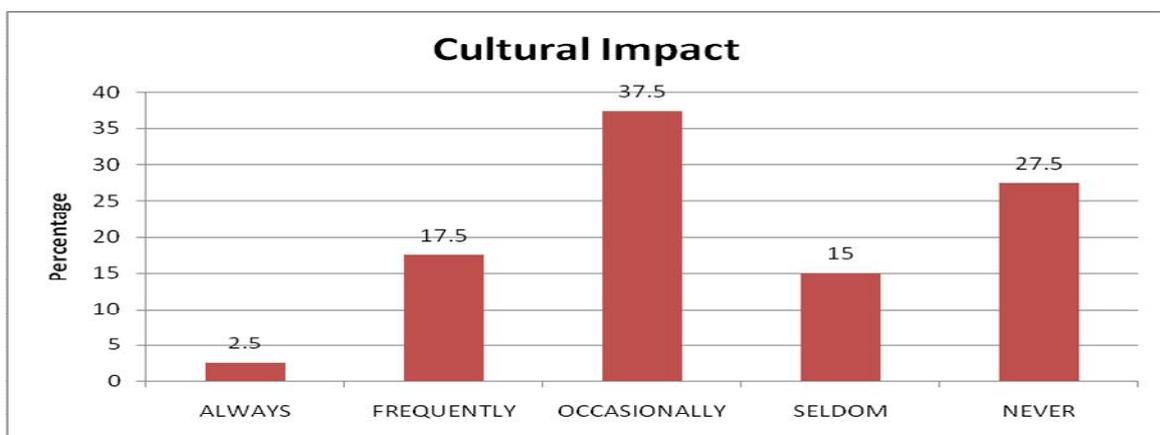


Figure 13: Cultural Impact

When asked about cultural impact, a good number of the respondents 15(37.5%) indicated occasionally. This was then followed by 11(27.5%) who stated never. 7(17.5%) of the respondents indicated frequently which was followed closely by 6(15%) who stated seldom. The researcher concluded that the level of cultural impact is occasionally being felt.

### **2.5 Hindrance to Planning**

The respondents quoted that most of the training they have under gone is civil engineering, building construction, electrical engineering, masonry, quantity surveying, construction management, building economics, with most of the respondents interviewed having undergone civil engineering training.

### **2.5 Cash Flow Influence on Planning**

Respondents cited cash flow and equipment as a variable that hinders planning of their business. Reasons being that small contractors have limited resources; lack of trained personnel was also maintained coupled with managerial skills and lack of relevant knowledge in construction works. Respondents experience misuse of business money. Labour shortage, lack of enough tools, in their day to day when running their business, they also commented on stipulating laws to support labour employees to meet their goals i.e. increase and stabilizing their salary.

### **2.6 Opinion to assist Small Contractors to Proper Planning**

Delay by contractors to pay money for material purchase leads to discontinuity of work leading to time wastage and to low employee turn up. Respondents said that cash availability determines how first the project is excelled. Delay by management in settling bills leads to disagreement between employer and employees, they further said that one can win a tender but lack capital to start the project. They said that if they can be given advance cash they will be able to start their projects. The main concern is that the government should give those loans, this should be followed by training in management of funds especially cash flow trends of a particular project, and government should also regulate employee's salaries. The contractor needs timely payment.

## **3.0 Summary, Conclusions and Recommendations**

The research was based on two objectives namely, to determine the scope of planning that is employed by the small contractors and determine the how low level of financing affects planning.

### **3.1 Summary**

Questionnaire completion rates is the proportion of the sample that participated as intended in all the research procedures. In the study, out of 60 questionnaires administered 40(66.7%) filled in and returned. This questionnaire return rates was deemed adequate for the study.

### **3.2 Conclusions**

Inappropriate contract documentation, cash flow problems, lack of management skills and poor office equipment and facilities, have been identified as some of the most common problems affecting the planning of small contractors. Availability of funds also results in delay sometimes due to late payments by clients. A plan should be a realistic view of the expectations. Preparation of a comprehensive plan will not guarantee success, but lack of a sound plan will almost certainly ensure failure. Deficiency in planning, cash flow and lack of management skills are said to be the greatest problems for small-scale contractors.

### **3.3 Recommendations**

Training needs should be addressed and if possible provided free or at minimal fees to enable as many small contractors as possible to acquire these basic skills. Timely, simplified, reliable and relevant information on market opportunities, production technology and government regulations should be passed down to these contractors.

## References

- Adam, O. (1997). Contractor development in Nigeria: perceptions of contractor and professionals. *Construction Management and Economics*, **15**, pp 95-108.
- Argiris, C. (1914). Integrating the individual and the organizational New York John Wiley and Sons Inc.
- International Labour Organisation, (1987). Guide-lines for the development of small scale construction enterprises, Geneva: International Labor Office.
- Jannadi, O. M. (1997). Reasons for construction business failures in Saudi Arabia. *Project Management Journal*, **28**(2) Jun 32-6. JICA (2006): Technical Cooperation contents for Urban Transport programme.
- Jankowicz, A. D. (2000). Business Research Projects. Holborn, London. Thomson Learning.
- Kumar, R. (2005). Research Methodology: A step-by-step guide for beginners. 2 Edition. London. Sage Publications.
- Lewis, T. M. (1984). A review of the causes of recent problems in the construction industry of Trinidad and Tobago. *Construction Management and Economics*, **2**, pp 37-48.
- Miles, D. (1980). The small building contractor and the client, London: Intermediate Technology Publication.
- Ofori, G. (1991). Programmes for the improving the performance of the contracting firms in developing countries: a review of approaches and appropriate options. *Construction Management and Economics*, **9**, PP 19-38.
- Rousseau, D. M. (1988). The Construction of Climate in Organizational Research. Chester Wiley
- Ruddock, L. (1992) *Economics for construction and property*. London: Hodder and Stoughton.
- Stretton, A. (1984). The building industry in Papua New Guinea, Papua New Guinea.