

The contractor–subcontractor relationship: the general contractor’s view

Adnan Enshassi,
School of Civil Engineering, IUG, Palestine
(email: enshassi@ iugaza.edu.ps.)
Zohair Medoukh,
Consultant, Universal Group, Gaza

Abstract

Subcontractors play a significant role in the Palestinian construction industry. The relationship between the general contractor and subcontractors is one of the keys to any successful construction project. Despite this importance, little information is available about the actual working relationship which exists between general contractors and subcontractors. Subcontractors are specialist agents in the execution of a specific job, supplying manpower, equipment, tools, and designs. They respond only for the executed part of the workmanship, acting as agents of the production system of the contracting company. The aim of this paper is to explore the actual working relationship between contractors and subcontractors. This study was based on a questionnaire survey of general contractors in the Gaza Strip. Information was obtained on reason, for subcontracting, communication process, selection criteria, negotiation with subcontractors, commitment, type of contract, and control tools. The results indicate that more than 90 percent of the work is performed by subcontractors. General contractors select subcontractors according to the complexity of the work and previous experience with subcontractors.

Keywords: Contractors, subcontractors, relationship, construction, development.

1. Introduction

The contribution of subcontractors to the total construction process can account for 80-90% of the total value of the project [1; 2; 3; 4]. This large involvement of subcontractors can be attributed to the shift from the traditional craft base, to a greater reliance on increasingly sophisticated technology-based products [2]. This has resulted in general contractors concentrating their effort, on managing construction site operations rather than employing direct labor to undertake construction work [3]. Arditi et al [5] has also attributed the increased use of subcontractors to the increased complexity of both the construction of buildings and the organizational relationship.

Subcontractors contribute significantly to the capital risk, resources, managerial effort, and business expertise supporting the largest industry in the country. The trend toward more subcontracted work accelerated as the technical development of building materials and methods escalated the requirement for craft skill and knowledge. Quality control and labor management problems on construction projects became less complicated for general

contractors utilizing specialty trade subcontractors in lieu for furnishing all craft labor themselves [6]. Hinze and Tracy [1] have studied the working relationship between subcontractors, and contractors in the United States from the subcontractor's perspective. They put forward a series of recommendations to improve the subcontractor-main contractor relationship. The purpose of this study is to explore the actual working relationship between general contractors and subcontractors in the Gaza Strip for the main contractors' perspective.

2. Overview of the construction sector

Construction sector is one of the key economic sectors and is the main force motivating the Palestinian national economy. Upon the establishment of the Palestinian National Authority and the assumption of its powers over the Palestinian territories in 1994, the construction sector has witnessed noticeable expansion and activities. The contribution of the construction sector to the GDP is currently rising in real terms and as a percentage of the total labor force. Construction sector contributes 33% to the Palestinian GDP. This is a large proportion covered by this sector, thus positively affecting various economic, social, educational and vocational sectors in addition to other Palestinian institutions. Construction is one of the most important sectors in the assimilation of labor force throughout Palestinian cities and towns. Construction sector employs an average of 22.3% of Palestinian labor force volume. It employs about 10.8% of laborers directly, and 30% indirectly in factories related to the construction sector and other service and productive sectors. Construction sector contributes largely to different sectors of investment, such as manufacturing of construction materials. In addition, it provides materials needed for construction, such as stone, marble, brick, floor tiles, etc. Further, the sector is one of the main resources of the commercial sector in Palestine [7].

This has resulted in the recovery of the construction contracting profession and subsidiary industries, encouraged the investment of the Palestinian expatriates' capital in the local construction sector, and contributed to the creation of jobs for thousands of Palestinians. Therefore, the construction sector has occupied the foremost position among the rest of sectors, mainly in the attraction of investments and creation of new jobs. In addition to subsidiary industrial and productive sectors, construction sector is the largest and most important of all other sectors. As such, the construction sector has been crucially significant, mainly in the past two years, for the role it plays in reconstruction, road rehabilitation and construction of infrastructure.

The typical image of the construction contracting profession, whether in the Arab World or in Palestine does not match the role active contractors' play in the building of their societies. Contractors are effective entities involved in all professions subsidiary to the construction sector through a complementary relationship. Further, contractors possess the skills necessary for financial management and project administration. Taking into account that a large number of Palestinian contractors are engineers, contractors' professional experience is also consolidated by Palestinian expatriates. Such status has led to the upgrading of the construction contracting profession in Palestine as regards quality, specialty and professionalism.

Construction contracting is considered the hub for construction sector in Palestine. Hence, Palestinian contractors have proved their national role and outstanding ability in construction and reconstruction. In addition, construction sector proficiency been enhanced following the establishment of the Palestinian National Authority in 1994. According to recent figures, contractors registered as members at the PCU have amounted to (1180) throughout Palestinian cities and towns in July 2003. Contractors registered as members in the West Bank have been (800), and those registered in the Gaza Strip have reached (380).

3. Previous studies

Subcontracting has been defined as a legal-economic relationship between two agents, in which the characteristic criteria are substitution and subordination. The substitution criterion means that the subcontractor executes the operation with technical and financial risks, instead of the job assignor; the subordination criterion means the subcontractor must follow the direction given by the contractor (Pagnani, cited in [5]. Another definition was given by Hinze and Tracy [4] who stated that the subcontractors are specialty contractors who are hired to perform specific tasks on a project. Subcontracting can be classified as volume subcontracting and specialist subcontracting. Volume subcontracting can be used when an enterprise commission a subcontractor because, while technically able to carry out the operation, it is overloaded and has to obtain additional capacity from another source. Specialist subcontracting can be used, when the main contractor obtains goods or services, which he does not produce or is not able to produce himself.

Beardsworth et al [8] pointed out that subcontracting could be seen as an organizational alternative for some economic activities. Firms are decentralizing their jobs more and more, allowing subcontracting to become a basic part of the work organization. Firm does not need to have the control of all the value string, being able to externalize non-strategical activities, aiming to reduce costs. The subcontractor's typical source of work is the general contractors that assume responsibility for complete construction of the project. At any point of time, the subcontractor is providing specialty construction services to a number of general contractors with varying expertise in subcontract development, subcontractor management and relations; project management, coordination, and control; and project cash-flow reliability. Decisions on individual projects are often influenced by the objective of sustaining an on-going relationship. Both the short-term (project) and long-term relationship with the general contractors are essential to the success of all specialty contractors [6].

Bennett and Ferry [9] described building firms as organized into a consistent operating core based on their individual capabilities. Construction companies are becoming construction managers or contractor managers, transferring construction work to specialists. Subcontractors are specialists' agents in the execution of a specific job, supplying work force, besides materials, equipment, tools or designs. They respond only for the executed part of the workmanship, acting as agents of the production system of the contractor company. Specialty contractors are construction

"job shops", performing construction work that requires skilled labor from one or at most a few specific trades and for which they have acquired special-purpose tools and equipment as well as process know-how [10].

Chung and Ng [11] have studied the practice of subcontractor appraisal in the construction of Hong Kong. They have developed a common standard to monitor the performance of subcontractors and to uplift the quality standard of construction works eventually. Russell and McGowan [12] stated that up to 95% of the total project value was entrusted to subcontractors in Canada. The trends was similar in Asia countries like Japan [13] and Singapore [14]. Adriti and Chotibhongs [1] investigated a number of issues in subcontracting practice such as: safety issues, productivity issues, construction insurance, and subcontracting bonding.

4. Method

This study was based on a questionnaire survey of general contractors in the Gaza Strip. The questionnaire design was based on previous related literature [1, 3, 5, 6, 15] and contractors' expert. The content and understanding of the questionnaire have been reviewed and tested. 100 questionnaires have been sent to general contractors randomly. 53 (53%) completed questionnaire have been returned and descriptive analysis has been used.

5. Results

The results indicated that the majority of the general contractors' respondents stated that it is a common practice to use subcontractor to execute specific operation in the project. They added that more than 90% of the works are performed by subcontractors. This result is similar to previous researches results in USA, UK, Hong Kong, and Brazil. The main reasons behind using subcontractors were found to be shortages of skilled labor, maximizing profit, reducing overhead costs, and reducing the work pressure on the main contractors. In addition, monitoring and controlling quality control, safety management, and labor management problem, on construction projects become less complicated for general contractors.

Concerning communication process between major contractors and subcontractors, 50% of respondents indicated that informal, face to face communication was the main mean for communication. The results indicated that 33% of respondents communicate with subcontractors by telephone. Only 6% of the respondents have mentioned that they have formal communication (using letters) with subcontractors. This result reflects the informal characteristics relationship between general contractors and subcontractors. This type of relationship (little documentation) can be a source of problems which may affect the progress and the quality of the work.

The majority of respondents (60%) have stated that they select subcontractors according to the required specific activity and to the nature and complexity of the work. It has been noticed from the results that 13% of general contractors' select subcontractors according to their previous experience with them. Surprisingly, 7% of the respondents select subcontractors based on their reputation. This can be traced to the trend of the major contractors in the local industry in selecting the lowest bid regardless of the safety and quality of work.

It has been found that 70 % of the respondents gave all necessary drawings and bill of quantities to subcontractors in order to estimate their costs for the required operations. It was noticed that only 7% of subcontractors have visited the construction sites during the estimation process. This has led, in many cases, to inaccurate cost estimation which affected the quality of the work as subcontractors are interested to make profit without enough attention to the quality of the work being implemented (this has increased the probability of a conflict and claims after construction work has begin). The general contractor required from subcontractors to submit in addition to bid price, method of execution, past experience in similar works, time schedule, expected obstruction, and any other special conditions.

The majority of general contractors' respondent committed with the selected subcontractors during the tendering stage when they awarded the contract. However, most respondents (87%) practiced negotiation with the subcontractors after winning the contract in order to reduce the agreed costs in the tendering stage. This may be due to the sever competition between contractors that enforce them to reduce the tender price, and thus asked the subcontractors to reduce their previously estimated cost. Regarding contract type between general contractor and subcontractor, it was noticed that more than 60% of the respondents used contracts similar to the one between owners and contractors. The other respondents used a simplified contract.

Regarding methods of measuring the performance level of the subcontractors, it was noticed that contractors (87%) have used bar chart and s-curve in monitoring the progress of the subcontractors. This reflects the formal procedures and gives a good tool to the management body of the project to correct any defaults that may occure by the subcontractors. Concerning the safety measures of the subcontractors, the majority of general contractors (93%) stated that subcontractors are obliged to adopt the safety measures as specified in the contract between the owner and the general contractor. This is a crucial point in the local construction industry as almost all works are implemented by subcontractors and general contractors.

The majority of the respondents have agreed that there is a close cooperation and a good flow of information exchange between general contractors and subcontractors. In general, the main contractors' respondents were satisfied with the performance of subcontractors.

6. Conclusion

This study has explored the working relationship between general contractors and subcontractors from the general contractors' perspective. A decision to subcontract part of the process should be a strategic decision, and not one driven solely by resource problems. It may involve long-term strategic views related to the core skills required for the company's future, as well as consideration of the importance of design re-use and internal control of the design and manufacture of the product. The general contractors have stated that, it is a common practice to use subcontractors to execute specific operation in the project.

There are many benefits to be gained from working with subcontractors. It provides skilled labore, reducing overhead costs, and reducing the pressure on the main contractors. Monitoring and controlling, quality control, safety management, and labor management problems on construction projects become less complicated for general contractors. It is apparent from the results that informal communication is practiced between general contractors and subcontractors. General contractors have indicated that they select the subcontractors according to the complexity of the work and previous experience with subcontractors.

Some subcontractors have failed to exercise the proper diligence and care when submitting their bids; even they do not have the time to visit construction sites during the estimating process. General contractors committed to the selected subcontractors during the tendering stage; they negotiate with subcontractors after winning the contract in orders to reduce the agreed costs in the tendering stage. This is due to the sever competition between contractors which enforce them to reduce the tenders price, and thus asked the subcontractors to review and reduce their previously estimated costs. Overall, general contractors indicated that they have good relationship with subcontractors and they satisfied with their performance.

Further in-depth study concerning all aspects of the relationship between general contractors and subcontractors is recommended. It is imperative to improve and develop the subcontractors position towards the general contractor, by upgrading the understanding of all contract terms such as; wording and potential for negotiations of conditions including indemnity, payment and retention terms, warranties and call backs, schedule of work, delays and liquidated damages, lien and bond rights, and of curse scope of work. It is advisable to establish a Palestinian subcontractors union for better networking improves the quality and conditions of work, improving the terms of contracting and place subcontractors in a good position in the local market.

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