Chapter 80
Bridging Modernity by Improving Informal Sector for Substantially Industrialized Construction in Developing Countries: Analysis and Future Directions

ABSTRACT

We have argued in Chapters 1-3 that the construction industry in developing countries is dominated by the strong presence of SMEs and "jobbers". The informal sector workers constitute the essential provider of human resources construction industry. So far, the weaknesses of the construction industry in developing countries have been identified. As a result, various decision models were proposed for largely improving labor cost management and scheduling (time) with the aim of improving productivity. In a single volume like this, it is unrealistic to cover all aspects to improve performance. This chapter will now provide ideas on how quality of projects can also be improved so as to maintain a balance between cost, time and quality. Furthermore, the management of onsite workshops that can lead to construction productivity will be examined.

BACKGROUND

Many developing countries including Cameroon are on a path to sustainable development driven by long standing strategies such as the Agenda 21 and the Millennium Development goals. In addition to this two, the Cameroon government recently launched the Vision 2035 setting development goals for the country to be attained by 2013. One of the strategies include is construction/infrastructural development. Although the construction of thousands of social housing is already being undertaken as part

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of the requirement to attain the 2035 vision, it has not been without challenges. One of the major challenges has been that of quality of the housing provided. Anecdotal evidence shows that a significant portion of the housing is falling behind quality standards and/or clients' expectations. This is also being exacerbated by the ever increasing population, particularly in cities putting supplier on pressure. Many analytical decision support tools and principles proposed in in the previous chapters demonstrate the feasibility of a substantial improvement of the performance of the construction sector particularly in housing projects. However, quality is not considered, then the delivery of a huge number of housing to meet demands will be as good as nothing. This chapter aims to appraise integration of quality into the delivery of construction projects. Onsite workshops arrangements that might affect quality and project delivery will also be examined.

INTRODUCTION

Most developing countries are implementing strategies to becoming emerging nations in the next few decades. The achievement of this milestone needs the implementation of several infrastructural projects able to provide ingredients required for rapid and sustainable development. Several projects including dam construction, road network, bridges, social housing, building for educational and health services, mining development, urban development and rural development can be noted in too many developing countries including Cameroon. Some other exemplary countries include Angola and Equatorial Guinea. So far, we have examined construction practices in developing countries. Challenges faced by professionals in making decisions about construction cost, types of equipment to be used and the choices of construction materials within limited constraints were discussed. Based on these challenges, some major decision support systems were proposed and used in the modelling knowledge about construction cost, labor costing and scheduling. A rule-based decision support system- a more encompassing approach, able to deal with complex decisions was implemented in software environment and demonstrated how reasoning can be conducted.

A new proposition aims to sum up the way by which the tools developed above can be efficiently used. It will permit easily to control construction cost. We have voluntarily chosen to use quality control approach, most able to globalize these tools in an economical instrument (enterprise). The aim of this chapter is to provide and implement practically new proposition based on synthesis overview of all what has been covered in this publication especially the valorization of the informal sector which potentialities are only those capable to guarantee great achievements of the construction sector in developing countries. As we have already said, the main support and jobs provider of the informal sector workers is these small and middle size economical units, in greater numbers, which contribution is very important to construction sector. It should be known that any proposition, how better or stronger it is couldn't be trustworthy if it is not based on these improvement mechanisms and on a quality approach process. That is the reason why we should firstly have a look into not only knowledge of how the actors play their role, but also the quality approach process as it is perceived today in developing countries construction sector. We will then precise our proposition based of an effective knowledge of weakness and strength of the construction sector.