Improvement of Labour Performance and Productivity in Uganda's Building Industry

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Abstract
Productivity of labour is particularly important especially in developing countries where most of the building work is still carried out on manual basis. Previous research has pointed out that productivity in the building industry is low and in some cases declining. Poor productivity of craftsmen is one of the causes of cost and time overruns on building projects. The objective of this research was to find the current state of efficiency of building craftsmen, the factors that affect labour productivity and ways of improving labour productivity.

Performance improvement for labour was addressed by investigating the dimensions of efficiency, effectiveness, quality, quality of work life, profitability, productivity and innovation. In order to find the state of efficiency of craftsmen, activity sampling was used. Activity sampling performed on the major activities among building craftsmen shows that craftsmen use about 40 percent of available time on productive activities and of this only about 20 percent is used for making buildings grow. It further shows that building craftsmen spend about 33 percent of the time on non-value adding activities. Results from a questionnaire survey indicate that ten of the most significant problems affecting labour productivity in Uganda are incompetent supervisors; lack of skills of the workers; rework; lack of tools/equipment; poor construction methods; poor communication; inaccurate drawings; stoppages because of work rejected by consultants; insecurity; tools/equipment breakdown; and harsh weather conditions. It was found out that having an educated-technically qualified workforce and having an experienced diverse workforce are regarded as the greatest enablers to innovation in building firms for driving forward productivity. The effect of design on construction and the level of tax regimes are regarded the greatest barriers to innovation in building firms. The level of training in science, engineering and technical education; and the level of research and development at the national level are looked at as the greatest enablers to innovation in building that will drive forward productivity. The size of the domestic market and the level of security are the worst barriers to innovation that lead to low productivity in the building industry in Uganda. The factors that affect the effectiveness of building craftsmen have been identified and ranked. According to the survey of workers, the most critical factors to address are the level of financial rewards, inability to achieve personal goals and poor level of training. In addition, workers are not satisfied with the level of participation in decision-making. To investigate the quality of work life, the degree of industrialisation was investigated. Case studies were used to assess the level of industrialisation in Uganda and the effect on productivity. The studies included the level of prefabrication; extent of use of mechanisation; degree of automation; use of robotics; reproduction; degree of standardisation; professionalised skilled labour; continuity of production; research and development (R&D); use of labour saving technologies; extensive use of forms and types of contract used. Results indicate that these are lacking and that the cost of labour is of the order of 30 to 40 percent of project costs and therefore labour is a significant factor in the cost of building. The quality of work life was investigated through the accidents at work sites. The major causes of reportable accidents in Uganda are being hit by objects, falls, machine injuries, and cuts from tools and materials. Accidents cause about 37 percent permanent incapacity for those workers who are affected hence greatly reducing their productivity. Most of the fatalities are due to collapsing buildings. In order to investigate the profitability and therefore the benefit labour receives from clients, the roles of the client in having a more efficient building process were investigated. The three roles in which clients were found to be most defaulting are payment of contractors on time, lack of support on training and inadequate support for worker health and safety. The barriers to waste minimisation efforts in the Uganda's context have been identified and a graphical aid is provided to enable decision makers to concentrate their efforts on the most influential (strongest), yet easy to overcome barriers. The barriers that were identified as strong but easy to overcome include lack of provision of inputs just when required i.e. pull driven scheduling, and inability of teams to maintain alignment with other teams. Improvement of labour performance and productivity in the building industry will make building cheaper and therefore reduce extreme poverty, avail more classrooms for Universal education and develop partnerships for development in line with the Millennium Development Goals and Poverty Eradication Action Plan.