

## **Executive Summary**

Prime Lands Group is a leading real estate company in Sri Lanka and has been in operation for 22 years. One of the main objectives of the company as a developer is to complete projects in a timely manner and handover to customers at the promised date. This is important since when a project is delayed, it leads to additional costs for the company as well as negatively affects the brand name among customers.

Through the problem analysis it was identified that there is a performance gap in the housing division of Prime Lands Group. The purpose of this field project is to identify the causes leading to housing project delays and provide actionable solutions to minimize future delays. The methodology used to gather data were, internal data from the company, focused interviews and questionnaires. Under the literature review the main focus was on the study areas of project planning and management, communication and coordination and labour productivity. Following this, the problem analysis was carried out through an Ishikawa Diagram as well as a Pareto Analysis.

Three root causes namely design and drawing delay, poor communication and coordination and low labour productivity were identified, and it is the understanding that solving the three main causes will solve about 80% of the issues leading to project delays. At the planning stage design and drawing delays is caused by the architect as result of not having clear deadlines or key performance indicators (KPIs) to meet. Additionally, the entire group of company uses only one architect, hence this has caused the architect to be over-worked and unable to provide designs in a timely manner.

Poor communication and coordination was also another issue that was identified as contributing to project delays. At present Prime Lands housing division does not have any systems or software to track progress of projects, manage resource allocation, and monitor responsibilities and tasks of individuals. As a result there is a lack of communication among team members as well as poor coordination. Decision making is also delayed since key decision makers such as Chairman and Deputy Chairperson cannot make quick decisions due to most information being in printed/manual format.

The final issue which was identified as low labour productivity also leads to delay in work completion at site and ultimately leads to project delays. The reasons for low labour

productivity at the site were due to slow progression of work, inexperienced workers, and high number of defects and re-works.

Actionable solutions have been recommended and some of these recommendations are supported by literature findings as well. Discussion with key personnel in the company such as HR Manager, Head of IT and General Manager have also helped formulate more customized solutions. As a solution to overcome design delays, development of KPI's for the architect has been suggested. This will be aligned to the critical path method through a Gantt chart which will be shared with the architect as well. The architect will be required to stick to the date plan and ensure that he meets the deadlines, failing to do so he will be able see the impact of delays on the critical path and be accountable for it.

To overcome poor communication and coordination a third party project management software called 'Open Project' has been recommended. Through this system the project team and other key decision makers can access various project information as well as monitor the project real time. Dashboards can also be created to obtain a snapshot of each project's position with just a click. This solution will significantly lower decision making delays and improve communication and coordination among team members.

In-order to address the final issue of low labour productivity, a compliance training programme has been suggested to be carried out among on-site contract workers. Since on-site workers work on contract basis, a compliance training on the procedures, protocols, policies, and best practices adopted by Prime Lands in the construction of its housing units need to be communicated to the workers. Thus a training programme before the commencement of each project and another at the halfway mark has been recommended. This will certainly improve the skill levels of workers and increase labour productivity.

By implementing the recommended solutions it is expected that Prime Lands can reduce project delays from current average of 5 months per project to 2 months within the next 12 months. Cost resulting from project delays will be curtailed to 5% from the current average of 7.85% within the next 12 months.

The human resource allocation required to implement the project has been carried out through a resource allocation table. Further the cost of implementation, as well as the benefit derived from implementing the solutions suggested have been carried out through a cost benefit analysis. Finally the output and outcome of the project as well as further recommendations that Prime Lands Group can implement have been presented.