

## **ABSTRACT**

Infrastructural projects are successful when completed within scheduled timeframe, allocated budget and specified quality. Delay is a critical challenge world over, leading to cost and time overruns, as well as abandonment of projects. The completion of Sondu- Miriu Hydropower project was scheduled to end in 2005, but was later revised to 2011 due to delay, which periodical reports linked to design and site-related issues, among others. Whereas causes of project delays have attracted many studies, the effects of such delays have not received as much attention. This study attempted to determine the effects of design and site-related delays on the project's completion. A causal-comparative design was adopted and primary data sourced in May 2011 from 39 senior management staff of contractual parties. Relative Importance Index was used to determine the relative importance of perceived effects of design and site-related delays on the project's completion; while Kendall's Coefficient of Concordance was applied to determine the degree of agreement among participants regarding their perceived effects of delays. The study found that design-related delays affected the project's completion by necessitating rescheduling and re-sequencing of planned activities (84.6%); increasing time-related costs (84.6%); as well as extending time or accelerating works (82.1%). Besides, site-related delays affected the project by causing re-scheduling and re-sequencing of works (61.5%); increasing time-related costs (59.0%); as well as preventing early completion (56.4%). The study recommends the need for sufficient time and budget for pre-design multi-disciplinary consultations, which should subject design approaches to critique, for acceptable, inspirational, durable, efficient and safe infrastructural facilities completed within scheduled timeframe and budget. Besides, there need for sufficient timeframe for negotiation, compensation and transfer of land ownership rights from communities to contractors. Satisfactory compensation of affected community members is important for galvanizing support and nurturing a sense ownership, which are crucial for timely completion of infrastructural projects.