

Drone Technology, a Game Changer in Construction Project Communication During COVID-19 Pandemic – a Case Study at Asanko Gold Mine – Tetrem Full Resettlement Project, Ghana.

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SUMMARY

Tetrem's full resettlement project was a key milestone for the Asanko Gold mines during the High peak of the Covid-19 pandemic. For humanitarians' grounds, the urgency of the project, legal requirements, and safety concerns of the affected mine community a full resettlement project of Tetrem Community had to commence during the Covid-19 pandemic by Asanko Gold Mine. Unfortunately, the impact of the coronavirus pandemic on the Asanko Gold Mine - Tetrem Resettlement project was not different from the overall COVID -19 pandemic on the construction industry. In order to ensure business or project continuity covid-19 protocols were in place and employees or workers were contained at the site. The project hoisted over one thousand (>1000) employees and 45 contractors and evolved both nationals and expatriates.

Unlike other pandemics, COVID -19 triggered a near-total shutdown of social and economic activity and plunged the global economy into a severe contraction. During the total shutdown of the global economy during the COVID-19 pandemic, the construction industry was one of the few industries that managed to maintain production to some extent. The pandemic squeezed supply chains and created difficulties including late or cancellation of deliveries, and price escalation from suppliers. The consequence is that many construction sites had to shut down for an indefinite period of time. Moreover, there were multiple stakeholders in different geographical locations and continents who were all eager to know how things were progressing on-site in the midst of the pandemic. Besides, investors and key stakeholders were kept out of the loop making it difficult for them to visually appreciate the progress and monitoring of the project, unlike their usual visit to the such project site.

At this point, Drone Technology became a huge game changer when we decided to engage it by collecting drone data weekly at the entire site to create photos, ortho-mosaic maps, videos, and 3D

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Models and shared with key stakeholders across different countries and continents. These aerial photos and maps created from drone data and shared largely helped the project managers and project engineers in their comfort zones to plan and monitor progress, coordinate with site managers, appreciate day-to-day activities, and control the budget. The captured images and recorded videos at the entire site and shared weekly among investors and project stakeholders also kept them in the loop, and boosted their confidence and enthusiasm about the project. Drone photos worth a thousand words; therefore, I highly recommend the usage of Drone technology in construction projects during such a global pandemic and on rugged grounds where human accessibility is restricted.

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