

NEWSLETTER

Project: Strengthening of River Bank on the Left Side, Sarada River, Anakapalli, Vishakhapatnam, Andhra Pradesh

Mr Arjun Kanoi was involved in the development of a project of Strengthening of river bank on the left side of the Sarada River in Andhra Pradesh. Mr Kanoi has recently passed 11th grade school and was a part of Techfab India's technical team as an intern during his six-month long internship in October 2022-March 2023. The project targeted to furnish a new and robust design of the left side river bank which failed in January 2023 due to the sudden drawdown of river water in the Sarada River. Previously, an RCC retaining wall with pile foundation was installed on the river bank as a protection measure but the riverside embankment settled about 5 feet from the top level within a day and the RCC retaining wall was broken and damaged.

The beginning of the design of the river bank protection system was crucial in terms of the criticality of the site conditions and hydraulic parameters at the site. Mr Arjun Kanoi was involved for finalisation for a flexible solution as they had recently witnessed a failure of a rigid RCC wall. Understanding the need of the hour, the technical team, designed a river bank protection system on an 11m high embankment at a side slope of 2H:1V. The design was checked for various failure criteria such as global stability and river bed scouring. Metal Gabion mattress of 500mm thickness having Zn+PVC coated wire mesh type 10x12 was provided as per the design. The gabion mattress protection system, being a flexible protection system, can sustain minor undulation at the site and can attain the shape of the undulated embankment surface without causing any major damage. The detailed design has passed the technical clearance from the client's chief technical consultant after a thorough assessment of the design. The work at the site is expected to begin after the monsoon season in the year 2023.

The hard work, dedication, and attentiveness of Mr Kanoi towards entire process helped him to understand the entire submission, which includes detailed design, drawings, and full project proposal for the river bank protection system with gabion mattress on the side slopes and bed of the river. During his productive stay at Techfab India, Mr Kanoi gathered a thorough understanding of the key areas of a project, project timeline, product details, design of the riverfront protection systems, and their installation at the site. The involvement of bright minds like Mr. Kanoi in a key project is always beneficial for the team and organization.