



## The Situation

The District Administration, Sambalpur Municipal Corporation, Irrigation Department on move to prevent possible flood situation in the city.

"Tangona Nallah" & "Dhobijor Nallah" ore the two major channels in the Sambalpur city which drain out surplus rain water from the city into Mahanadi River. In the event of high flood situation in Mahanadi and heavy rain in the locality, the rain water of the city does not find a way to the river due to closure of sluice gates at discharge points and thus causing flood like situation in most part of the city in the past.

With a view to prevent the possible flood situation in the city are, the Irrigation Department, as a major move, has cleaned the bed of the Dhobijor nallah & Tangana nalloh before the on-set of monsoon this year so as to ensure free flow of rain water to the river. The SMC has also taken up massive drive for cleaning of all main as well as internal drains in the city by engaging adequate manpower and machineries before the rainy season.

In addition to the above the high power pumping station is also coming up at Binakhondi to pump out the surplus rain water of the city in to the river in the event of shut down of the irrigation sluice gates at the said locations during higher water level in river Mahanadi.

Water logging scenario during monsoon in sambalpur.



Mahanadi river rising alarmingly as odisha stares at floods.



Flood-free Sambalpur Roads Unlikely as every Monsoon...



"SAMBALPUR: Every monsoon, overflowing Dhobijor nallah causes artificial flood in Sambalpur town. The nallah carries sewage of the town besides water from canal head of Hirakud command area. When it rains, the colonies along the nallah and low lying areas get inundated. The nallah flows into river Mahanadi and during heavy rain, as water level in the river rises, its sluice gates are closed. This aggravates the situation as water in the nallah flows back into the town...." - Published by Express News Service.

Designing, supply, installation, testing & commissioning of Non Clog Pumping Machineries with Mechanical, Electrical & other accessories complete for Storm Water Pumping Stations.

Name of Pumping Station	Pump Model	No. of Pumps	Flow (m3/hr)	Head (m)	hp
Binakhandi Pumping Station	ANS 6081 TQ LL 150	10	3600	7	150
Balibandha Pumping Station	ANS 6081 TQ LL 150	8	3600	7	150
Tanga Nallah Pumping Station	ANS 2542 TQ LL 022	2	540	7	22.5

### Project Data

Project : Sambalpur Storm Water Project, SMC, Odisha.  
 End Customer : Odisha Construction Corporation Limited, Odisha.



### Aqua's Solution :

Work on two pumping stations at Balibandha and Binakhandi is about to complete. Work is being implemented by Odisha Construction Corporation Limited (OCCL) and 18 Aqua's pumps will be installed at these two pumping stations to prevent water-logging. Come monsoon, the low lying areas along Dhobijoar nullah and Tengna nullah that carry sewage and water from canal head of the Hiraikud Command area, gets flooded. The Dhobijoar nullah opens to Mahanadi at Balibandha and Binakhandi. Since water level of the river rises, the sluice gates which release water from the nullah are closed to prevent the backwaters of Mahanadi from flowing into the city. As a result of this, water in the nullah flows back into the city resulting in deluge. The pumping stations proposed to be located along river Mahanadi will ensure that the flood water can be pumped into the river during monsoon. This will also solve water-logging problems in the low lying areas. Once constructed, the pumping station will bring relief to the residents of Charbati, Mandlia, Chandan Nagar, Binakhandi, Balibandha, Govindtola, Bahalpada in Sakhipara, Hiraikud Colony, Thakurpada, Housing Board Colony, Cherupada, Mudipada and Kumbharpara besides other low lying areas of the city which have been bearing the brunt of artificial flooding. After a long time the citizens of Sambalpur finally heaved relief from artificial flood.

### Conclusion :

Aqua was able to complete the project in the time frame due to its system Engineering and Application Engineering capabilities. Aqua's Concept to Commissioning approach was responsible for the end customer delight. Technically competent execution team, which is the strength of the Aqua, took timely accurate decision made necessary recommendations to the stakeholders. There are the reasons how Aqua touches the new heights day by day by making new benchmarks continuing in providing sustainable pumping solutions.