

Construction of Submersible bridges

in the Rural Areas of Myanmar



NPO Japan Infrastructure Partners



There is almost no bridge in the Rural Area.





Students go to school by crossing the river so they don't get wet with the textbooks and so on.

Sometimes it is impossible to go to school due to a flood, or the school is closed.

villagers has been swept





Determined by onsite inspection from more than 100 candidate sites.

Township

away twice in 2 years.

A bridge built by the



There is a bridge where the cars can cross, but during the rainy season, it is dismantled in fear of being washed away. People use the boat to cross the river. Cars are queuing on both sides.

What is the Submersible bridge?

Normal Bridge (Always above Water)



Submersible Bridge (Sometimes goes under Water for short Duration) Water Level occuring often in Rainy Season

- It is true that a bridge (river bridge) is designed to be higher than water level of once-in-30-to-50-years' flood.
- The submersible bridge only bridges the part of the waterway where water flows normally.

A few times a few hours during the rainy season (flood period), it becomes impossible to pass the bridge, but as it

Answering the expectation of the residents,



Surrounded by school boys and girls, On the day of the Ground Breaking.





- becomes possible to pass through as soon as the flood is over: there is only small hindrance to traffic.
- The cost is much smaller than the usual bridge
- Since it is made at a low position, it is easy to make a foundation.
- The length becomes shorter, so the cost becomes smaller in a synergistic manner.
- It is designed simple to reduce the resistance of the flood stream, so it is even cheaper.
- 5 or more submersible bridges are to be constructed with budget to construct 1 ordinary bridge.
- It is easy to carry out the construction because it uses only the materials (cement, gravel, sand, and steel bars) that can be easily procured in the local area, and the construction is easy because the bridge design is simple.

The Submersible bridge is very suitable for quickly spreading roads across the country in numerous numbers of rural villages.

Using materials that are readily available locally.



Joyous people gather to welcome the opening ceremony.

There's a bridge!



Going across the bridge safely

Mr. K, who was bitten by a snake, was taken to a hospital



Myanmar people to make bridges themselves.



Villagers who are putting away a mountain of driftwood after a record flood in 2018. It's the "Bridge of Our Own."

Next step is to plan and construct by Myanmar people themselves.

Hands-on training on planning techniques at the workshop.



immediately, and his life

was saved.





Also ox carts are moving back and forth.

Explanation and teaching was made to students of The Government Technical Institute, Thayet who visited the site.



The construction and technology transfer of the submersible bridge is being carried out as a project of the Ministry of Foreign Affairs' "Grant Assistance for Japanese NGO Projects".