



Construction of submersible bridges in rural areas in Myanmar



jip Non-profit organization Japan Infrastructure Partners



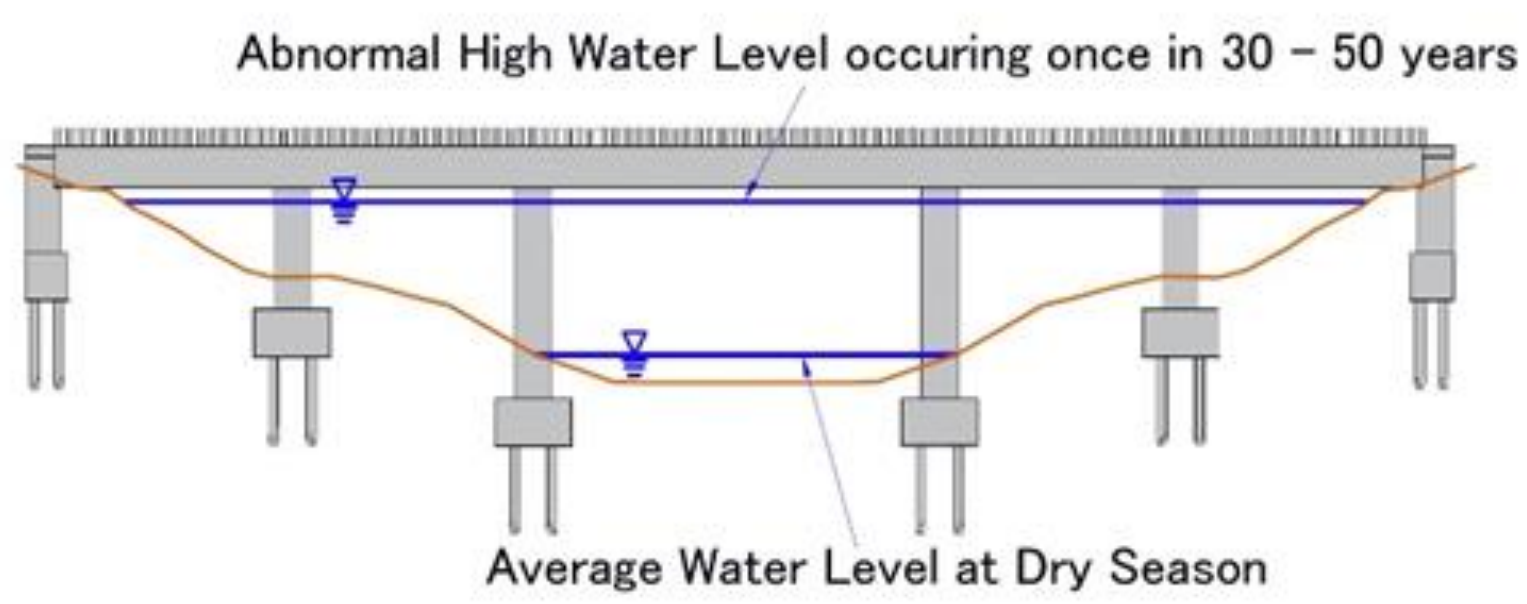
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➤ What is the Submersible bridge?

Normal bridge is built above the water level which occurs once in 30 to 50 years during a flood.

Submersible bridge is built above the normal water level.

Normal Bridge (Always above Water)



Few traffic blockings!

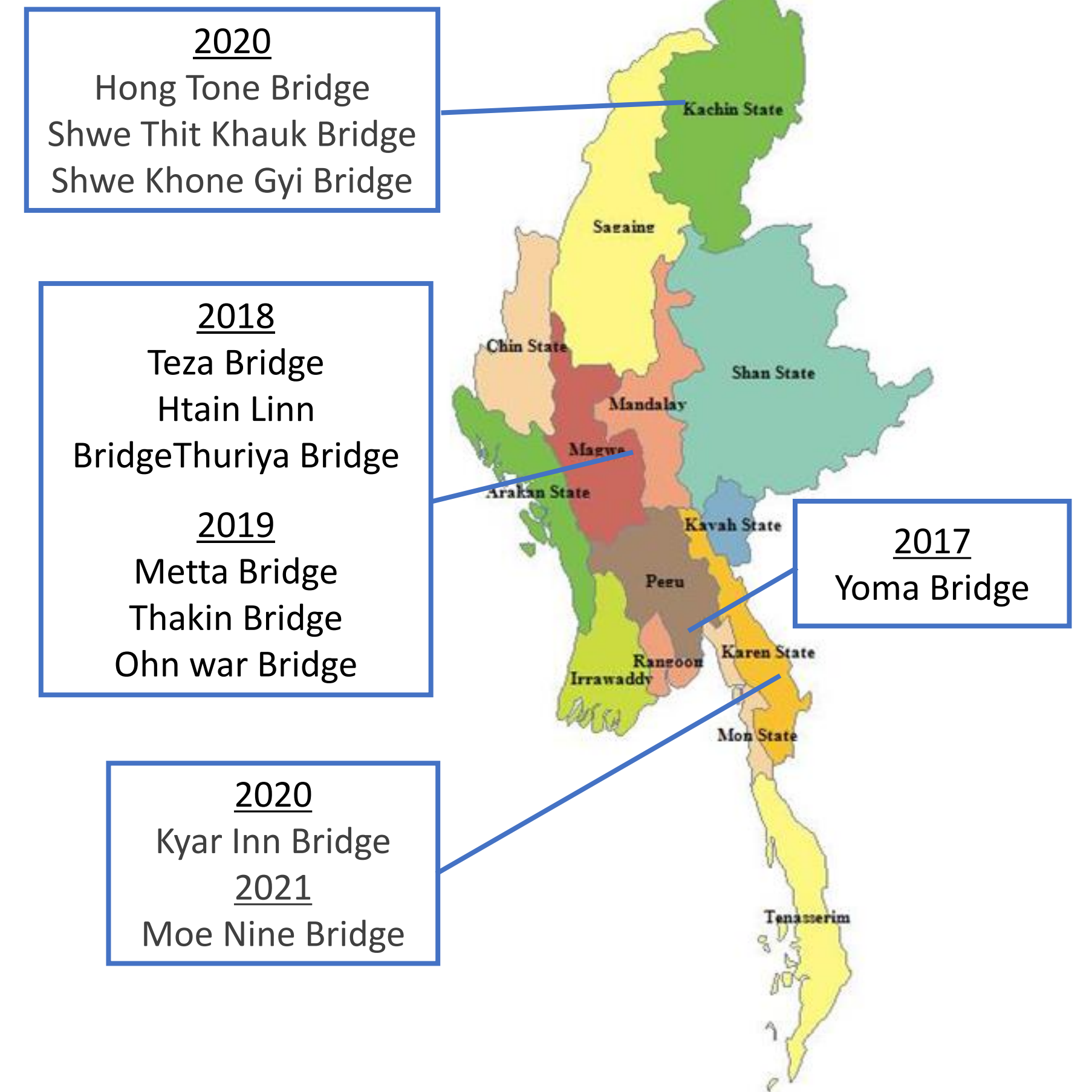
It becomes impassable a few times a year, a few hours a time but soon it becomes passable when a flood is over.

High cost performance!

Since it is built at a low position, the **foundation becomes easy** and **length becomes shorter**.

- **Simplified structure** reduces the resistance of the flood stream.
- **5 or more submersible bridges** are to be constructed with the budget of **1 normal bridge**.
- Using materials and methods that can be easily procured and adopted in the local area.
- Simple design makes the **maintenance easy**.

➤ Submersible bridge construction sites



Submersible bridges are suitable for quickly spreading roads in countless rural villages across the country.

Locations are determined by field survey from more than **100 candidate sites**.

Regional governments started the construction on their budget under the JIP's instruction.

➤ Hard life in rural areas without bridges



Students went across rivers with textbooks over their head.

Schools were often closed due to floods.



Bridges built by residents were washed away easily in floods.



Passengers were waiting for boats on both riverbanks during rainy season.

➤ With high expectations from residents construction during rainy season

Groundbreaking ceremony with many school children



Bridge opening ceremony with delited residents



Cast-in-place piling to build foundations firmly

Using materials that are available in rural areas



➤ Improvement of life by bridges

Bridges will be no longer washed away.



An injured man was immediately taken to the hospital and saved his life.

➤ Plan, Construction and Maintenance by local people

Residents cleaned driftwoods together after the record flooding in 2018.



Spans with the same dimension to simplify the design process

Hands-on training to local construction workers and students at workshops and construction sites



Children can go to school safely.

Farmers can stably ship products to cities.



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