



# Bridge for Pitigoda



## **Our Project:**

to build a suspension bridge across Ma Oya in Pitigoda, a remote village about 12km from Hunnasgiriya.



From November till January the Oya swells suddenly, 2-3 times a month, water level rises more than 3 meters and becomes impassable



The flooding remains up to 3 - 4 days, and in April and May there are floods lasting 1 - 2 days.



During flooding times,  
the water level rises up  
between 3 - 4m.



During these times the villagers who go to the other side of the river to protect their crops get stranded and have to go without food.



When the water level is normal during the rainy season it is very risky for people specially the children to cross it due to the high speed of the water.



# BRIDGE BUILDING IN PITIGODA



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# ENGINEERS WITHOUT BORDERS (EWB)



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**Who we are:**



Engineers **W**ithout **B**orders  
of the University of  
Karlsruhe (EWB) is an  
approved German charity.



Its members are all volunteers and have to bear their costs including a part of flight costs. The funds raised are used exclusively for the project at hand.



Projects are designed, financed and supervised / executed by students and are supported and encouraged by the University academic staff. University of Karlsruhe is one of the prestiges Universities in Germany, is now the Karlsruhe Institute of Technology.



# EWB - SRI LANKA

## Rainwater-Harvesting in Pubudugama





EWB were already involved in making 25 Rain water harvesting tanks in Pubudugama a hill top village about 15km from Kandy.



# EWB - SRI LANKA

## Tsunami Aid around Trincomalee



Seebeben:  
26.12.2004





And inTsunami Relief in the  
eastern province



**....and now to Pitigoda**



# EWB - SRI LANKA



## Bridge Building in Pitigoda





## Upcountry around Kandy





## The Village

- About 300 Villagers
- Growing of Rice and Vegetable
- No Electricity
- Water supply through the Ma-Oya River





The road to Pitigoda is not motorable. The agricultural produce is transported by “Thavalam”



# Transport



2008-2009: Road Construction



# The School

- About 30-40 Students

-2008: New Teacher was assigned





# Agriculture



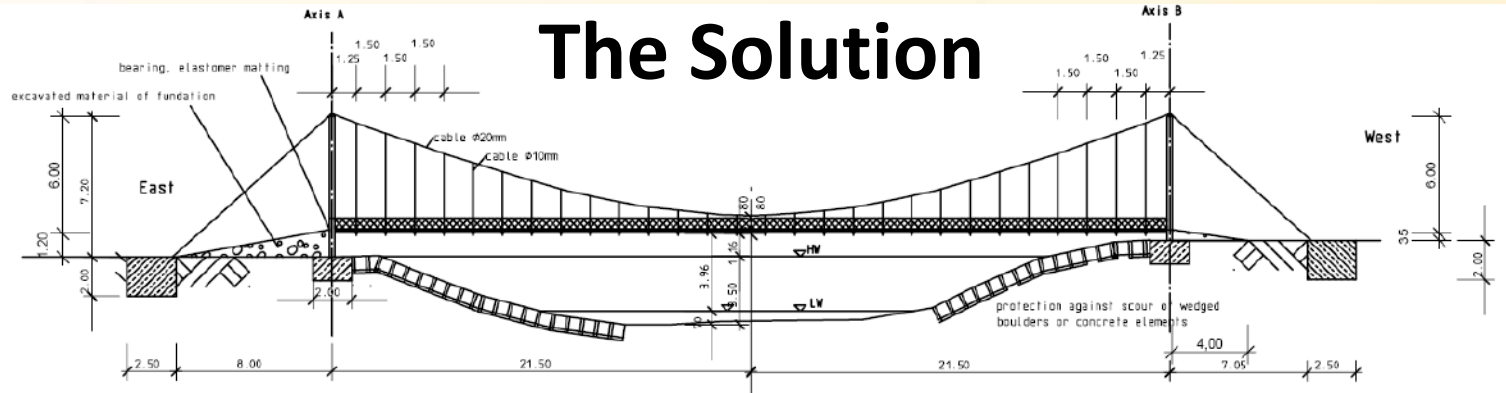


## The Problem





# The Solution

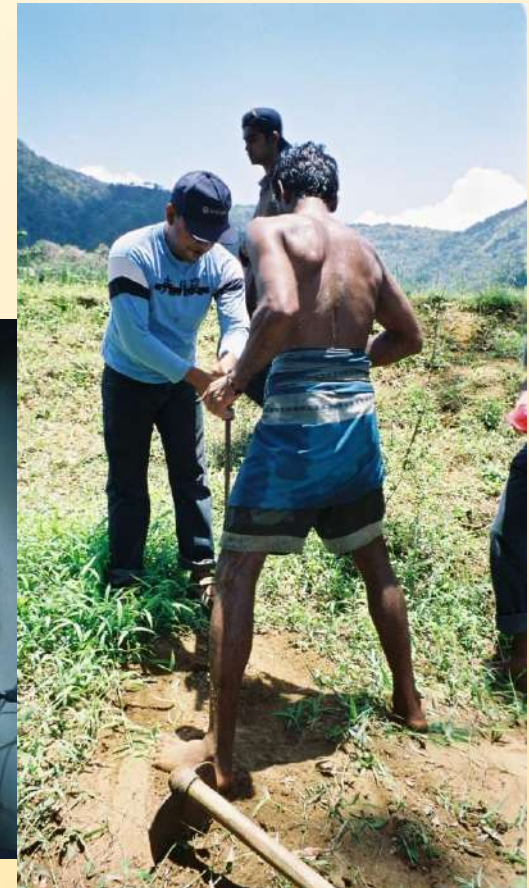


- Suspension Bridge
- 43m Span
- Concrete Foundations
- Steel Pylone
- Wooden Walking – Platform





## Field Investigations 2007





From the early days we received valuable support from a senior lecturer of the civil engineering dept. of the Peradeniya University and 2 final year students.



# Construction



Start: 10.09.2009



# Excavation





## Reinforcement and Anchor





## Concrete Work





Transporting the concrete  
mixing machine across Ma  
Oya was done with the help of the  
villagers.





# Pylons





# Steel Ropes





# Wooden Structure





# Wood Joints





## Finishing Work





# Bridge Opening





After the opening ceremony Engineers Without Borders handed over the Bridge to the Udu Dumbara Pradeshiyasabha. They have taken over the responsibility for the maintenance of the bridge.



# Impressions













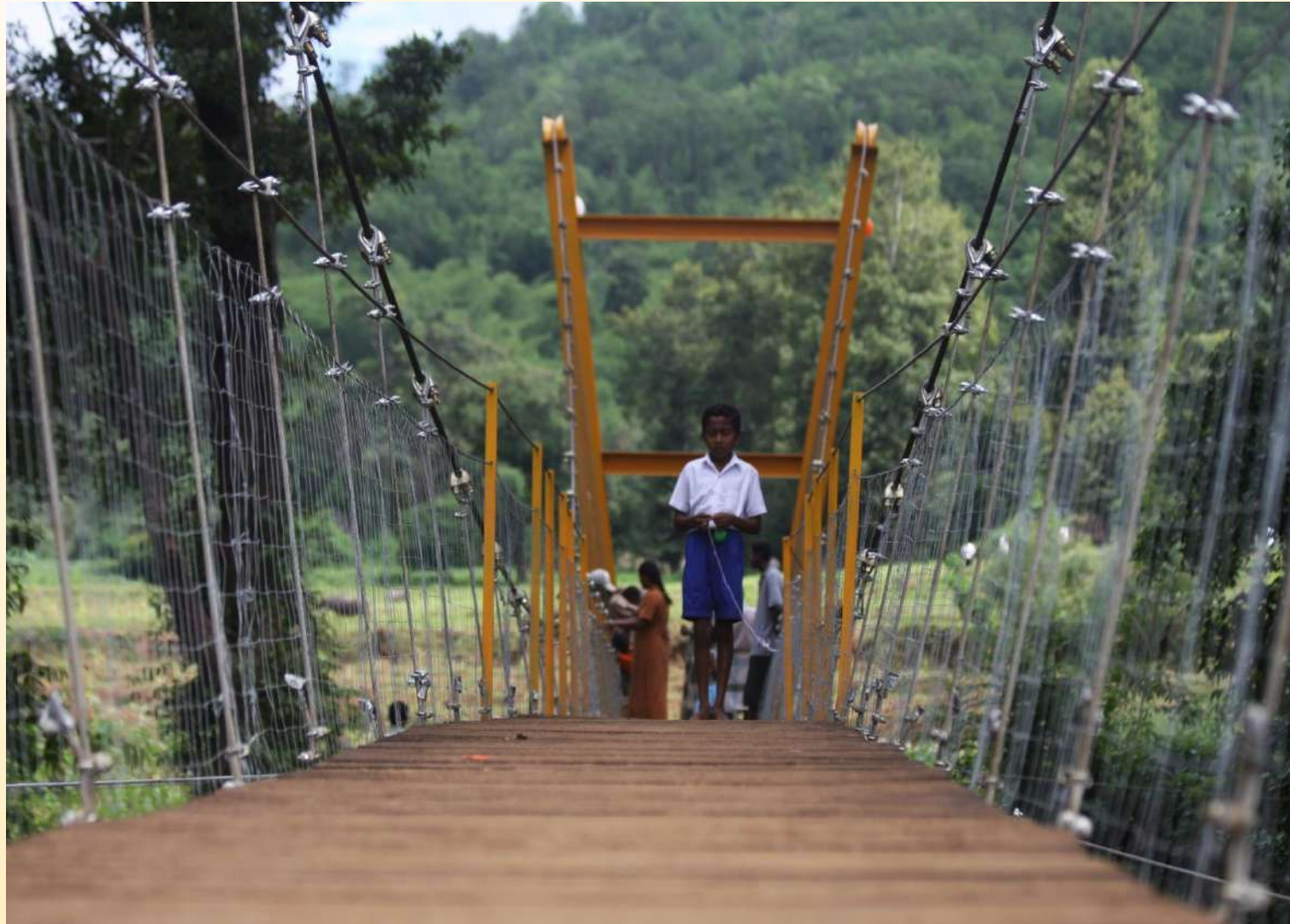
Carrying the steel pylons across Ma Oya to the other side was done with the help of the Pitigoda villagers.















# Building Bridges across Cultural and Language Barriers is fun !





**Thank You!!**



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