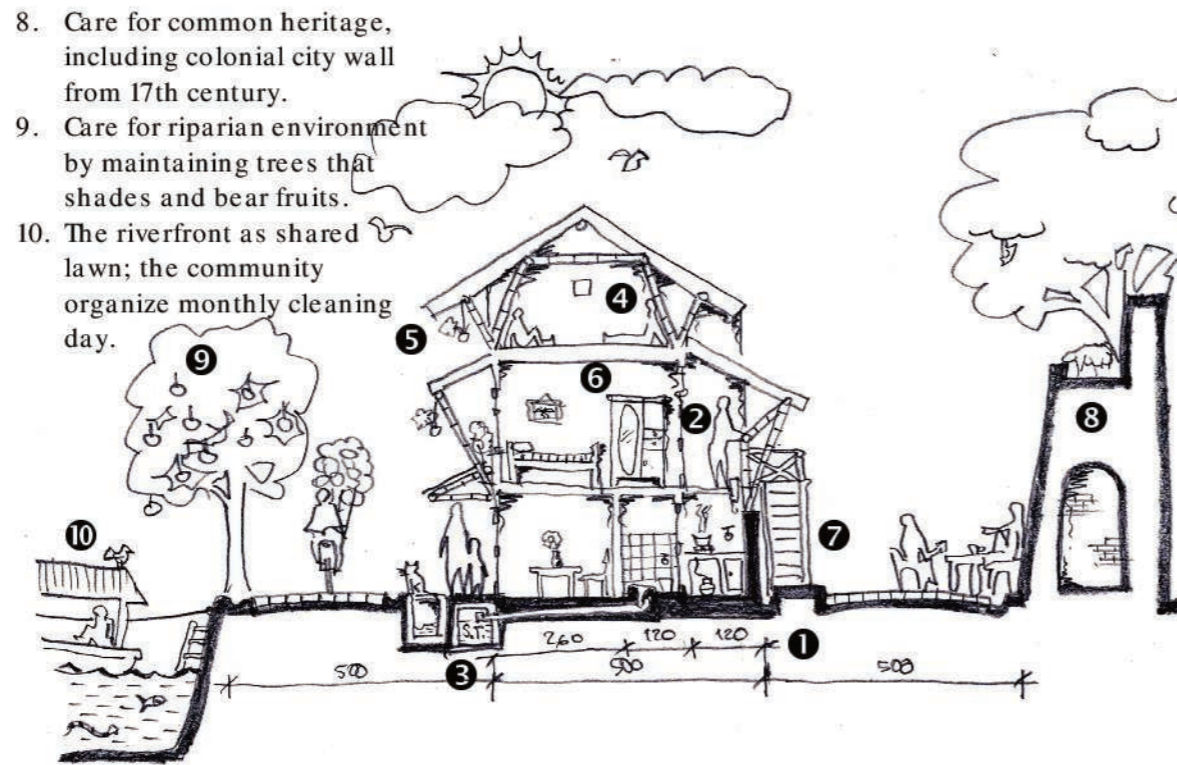


Fear of eviction, Kampung Kerapu, Lodan, and Tongkol in North Jakarta decided to tear down structures to give space for five-meter wide lanes along Ciliwung river banks. Further, six families eager to build their house from scratch and build a Pilot House.



10-PRINCIPLES OF PILOT HOUSE

1. Land sharing; three-storey building, four dwelling units for well-knitted families.
2. Shared stairs and corridors to get the maximum and spacious living space.
3. Single water supply system for two bath/WC units with one septic tank.
4. Bamboo roof trusses, an environmental-friendly building material.
5. Sufficient airflows and natural light for each room for energy saving.
6. Reuse of stairs, wood beams, etc. from the torn building enhance cost-effectiveness.
7. Mural paintings by children; for community cohesion and sense of belonging.



8. Care for common heritage, including colonial city wall from 17th century.
9. Care for riparian environment by maintaining trees that shades and bear fruits.
10. The riverfront as shared lawn; the community organize monthly cleaning day.



▲ before ▼ after



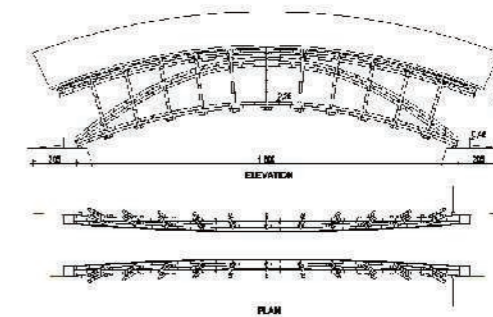
With EUR 12.000 loan from *Urban Poor Consortium* the group started the House. As part of participatory design process, ASF-ID organise bamboo preservation and construction workshop and ensure skill and knowledge transfer.

A year has spent. The three kampungs still continue with upgrading, which includes; construction of collective septic tanks, drainage and road repair, and last but not least, facade makeover. Ongoing technical supports is being provided from the architecture department of the University of Indonesia.

PILOT HOUSE AND KAMPUNG UPGRADING  
 Project lead: Kamil Muhammad, Brahmastyo Puji, Amira Paramitha, Herlily  
 Partners: Anak Kali Ciliwung, Arch. Dept. of University of Indonesia  
 Initial cost: ca. EUR 12.000  
 Main Funding: Urban Poor Consortium  
 Construction time: Aug. 2015 - Ongoing

# PILOT HOUSE AND KAMPUNG UPGRADING IN JAKARTA

## ARCHITECTURE SANS FRONTIÈRES INDONESIA



The city of Solo in Central Java gains a public bamboo bridge by *Architecture Sans Frontières Indonesia* (ASF-ID). The pedestrian overpass is located above the Kali Pepe river, between the historical sites of Pasar Gede market and Vastenburg fort. The pedestrian bridge spans 18-meters, with a track width varying between 1.8 and 2.3 meters. The project is commissioned for construction as part of The 2nd *Bamboo Biennale* held in October of 2016.



▲ The bamboo bridge aims at rejuvenating river life and culture in Solo.

◀ Floor finishes of reinforced concrete aimed for comfort, durability, and ease of maintenance.

Experienced carpenters from Yogyakarta led the construction process during the period of October-December. Bamboo species of *petung* (*Dendrocalamus asper*) provided by *Bambubos* has been treated for pests. Sufficient roofing is also supplied to lengthen the structure's lifespan.

The adjacent community of *Kampung Ketandan* has also contributed to the construction and management of the bridge, through provision of lodging for carpenters and volunteers. The locals further agree to guard and care for the structure that is the first of its kind in Indonesia. In the context of promoting bamboo as a promising material for the future, the bridge is showcasing the value of the material for a public facility within cities.



▲ Scale models are built and tested at the engineering laboratory of Parahyangan Catholic University.

Main frames are assembled and joined together at the bank of a parking lot. ▶

# BAMBOO BRIDGE IN SOLO, CENTRAL JAVA

## ARCHITECTURE SANS FRONTIÈRES INDONESIA

### BAMBOO BRIDGE IN SOLO

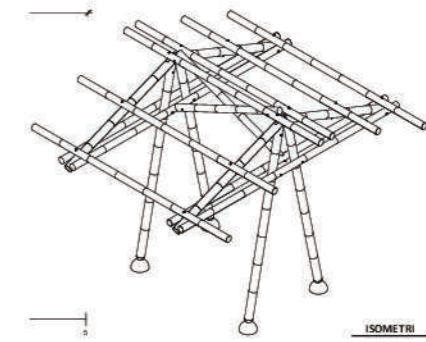
Project lead: Andrea Fitrianto, Altho Sagara, Klaus Dengen, Sisca Pramudya

Partners: Parahyangan Catholic University (Bandung), Bambubos (Yogyakarta)

Total Costs: ca. EUR 10.000

Main Funding: Indonesia Agency of Creative Economy (BEKRAF) via Bamboo Biennale (Solo)

Construction time: Oct 28th, 2016 - Jan 28th, 2017



Rhizomatic Kampung is an initiative that seeks attention of community members on the potentials of natural and local resources i.e. bamboo as construction material. A program that is run by locals, such as community youth, may give path to sustainable development in foreseeable future. Among important components in the scenario is to discover economic value of treated, bugs-proof, bamboo poles. Success in entering local and regional construction market will generate income for the village. Self-sufficiency is encouraged through participatory village planning, which will be followed by execution of community projects. Rhizomatic Kampung addresses immediate spatial needs with local materials and workmanship, with a vision of sustainable and self-sufficient kampung.



▲ From bamboo harvest, to treatment, to construction.

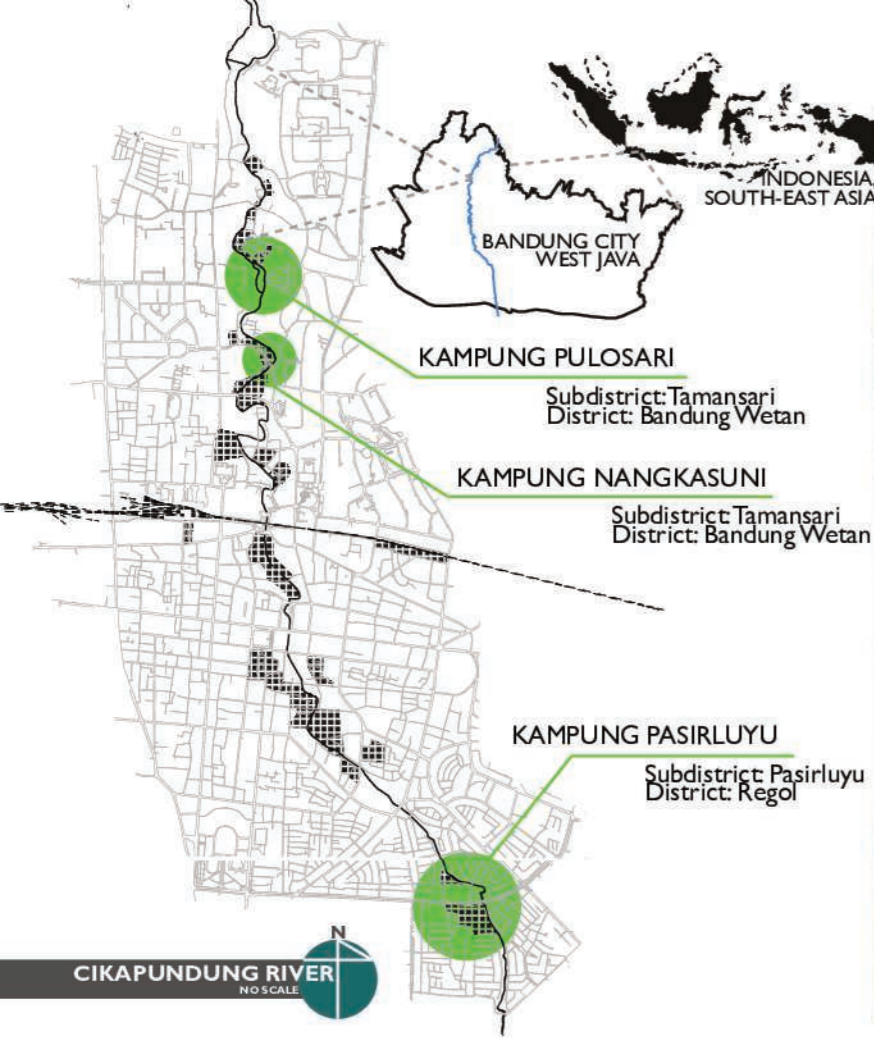
◀ Series of workshop on participatory village planning have been done since October 2016, involving coffee farmers and youth.

Treatment tower to provide durable bamboo poles for permanent use in construction ▶

# RHIZOMATIC KAMPUNG IN MALANG, EAST JAVA

## ARCHITECTURE SANS FRONTIÈRES INDONESIA

RHIZOMATIC KAMPUNG IN MALANG  
 Project lead: ASF Malang Raya  
 Partners: Jengger Hamlet, Dampit Village  
 Current budget: EUR 7.000  
 Main Funding: East Java Christian Church  
 Program start: Oct 2016 (on going)



▲ One of participatory process with Pasirluyu community: dream community workshop

Kampung is often mistaken as slum. However, the roots of both differ from one another. Indonesian kampung typology is a self-built settlement; most even existed before the country's independence. However, the rapid development of cities has pushed kampung into dilapidated conditions. The widening gaps had also left behind kampung communities as important decision maker in macro planning processes.

Majority of Bandung city built fabric is kampung (41.62%). Thus, kampung is the city's real face. With concerns of collaborative and socially responsible practices of architects and academics, ASF-ID initiated kampung community mappings in Pasirluyu and Nangkasuni community, Cikapundung riverside, Bandung. The kampungs have been engaged with participatory thinking in mind. The effort is supported by Perween Rahman Fellowship 2015, Architecture Student Community Service of Parahyangan University (UNPAR) and Architecture Dept. of Universitas Pendidikan Indonesia (UPI).

Collaborators have encountered many findings. The program has become on-the-ground laboratory for architects and students alike. Issue of development gap is one major find. Gentrification is also occurring in ways that often displaced kampung inhabitants into fringe areas. This can be a problem as kampung have been a source of goods and labors for the city activities. Thus the housing prices hike and the city development favors the trend; making the communities even more vulnerable.

The joint work had organized historical, spatial, and Participatory-GIS mappings with participatory method in 2015-2016. In Pasirluyu, a national workshop and architectural competition was organized with UPI, gathering students from various cities to do one-day work in the kampung and one-day work in the studio. ASF-ID and architecture students from UNPAR also organized participatory mapping and planning in Nangkasuni that was summarized in a booklet.

Since December 2016, ASF-ID has started to complete this program with built community projects such as community playground and shelter. The two years process has also led ASF-ID to network with more community in the Cikapundung riverside. Correspondingly, volunteer network has been formed in Bandung and as well as from other cities.

COLLECTIVE HISTORY MAPPING

ENVIRONMENT & SPATIAL MAPPING

DREAM COMMUNITY WORKSHOP



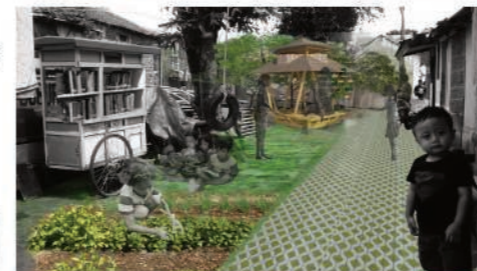
▲ Time line and manual sketch history mapping



Participatory manual mapping



▲ Collaborative GPS mapping with local people + drone spatial mapping



One of proposal from 'dream community workshop'



Planning the dream community



# CIKAPUNDUNG RIVERSIDE COMMUNITIES MAPPING

## ARCHITECTURE SANS FRONTIÈRES INDONESIA

Cikapundung Riverside Community Mapping

Project lead: Fransiska M. Damarratri, Usie Fauzia Anniza  
Partners:

(a) Asian Coalition of Housing Rights – Perween Rahman Fellowship 2015,

(b) Architecture Student Council of Parahyangan University,

(c) Architecture Department of Universitas Pendidikan Indonesia  
Program duration: 2015 - 2016

Total cost: \$2500

Main funding: Perween Rahman Fellowship 2015