# THE LU BAN HOUSE PROJECT

development plan

The Lu Ban House-project aims to realize an ecological house constructed out of bamboo, based on a three-sided pyramid. It is an open source project, which means that once the design is finished, it will be distributed free of charge whilst inviting people to contribute to it's furthe development. The project seeks to be financially feasible through crowdfunding.

## THE PROJECT

The Lu Ban House-project revolves entirely around (designing) a cheap and environmentally friendly house made of bamboo. It is a small 3-storey building, budget-friendly, ecological and relatively easy realizable property for a subtropical climate. The design will be available free to everyone who is interested to use it or develop the concept further. In order to achieve cooperation, the project will be realized according to the open source philosophy: all the essential information will be shared as much as possible with the rest of the world, enabling everyone to make maximum use of the concept, and share thoughts on design and related practical knowledge.

### WHO STARTED IT?

The Lu Ban House is an idea developed by filmmaker Fedor (Sendak) Limperg. The concept will be developed to it's end with the support of several professionals (architects, draftsmen and engineers).

### THE IDEAS BEHIND IT

The Lu Ban House-concept started from the idea of working with bamboo in a kite-like design. The basic construction uses single bamboo poles for the construction, using as little material as possible and using one single poles in more than one way if possible (which results in a similar shapes as we have seen in various kites all over the world). Another key inspiration for the project is the 'luxawam', and idea of Dutch punks in the '80, which consisted of building wigwam-like houses, as used by American native tribes, in the city of Amsterdam in The Netherlands, as an alternative way of housing, during times of house famine.



### POSSIBLE LOCATIONS

A Lu Ban House can function as a home for a small family in Asia, Africa or Latin America. It should offer an environmentally friendly and cheap alternative for those who want to build a house in those areas. Additional ideas consist of developing ways for Lu Ban Houses to be build together in several combinations, plus developing variations of the building like a version without ground floor, versions with self-sustainable energy installations, etc.

#### PHASES OF THE PROJECT

The different steps of the Lu Ban House-project:

- develop the primary design of the house by creating a small 3D-model (scale 1:150) completed
- explore the design in more detail by creating a larger 3D-model (scale 1:10)
  completed
- involve professional (architects and engineers) in order to develop the basic construction/design, and writing a first manual how the build the house for third parties
- 4. develop the details of the building, including professional drawing plans, blueprints etc.
- 5. execution of (a) test house/houses to improve, developed detailed building instructions and gather feedback (all to be documented and implemented in the construction manual)
- 6. distribution of the concept (promotional activities etc.)



#### WHERE ARE WE NOW?

We are working to realize a phase 3: execution of the basic construction plans. We are seeking to fund this part of the project through the Dutch crowdfunding platform "Voordekunst". Current phase 3 as well as phase 4 of the Lu Ban House concept are to be developed together with the Colombian architect Fredy Pantoja IMPAR of architects, and expected to coaching and / or advices of Geurt Holdijk.

### THE AIMS OF THE LUBAN HOUSE

# The Lu Ban House-project:

- follows the basic design idea of the 3D scale models (developed in phase 1 and 2)
- uses bamboo as a primary material for most of the construction work
- keeps open possibilities of reshaping the design of the house to different desires
- seeks for environmental friendly solutions
- seeks for affordable solutions
- supports the open source philosophy

# ADDITIONAL INFO

#### The Name

The name of the Lu Ban House derives from the Chinese ancient master 'Lu Ban', known for his inventions (including the kite), and he still is worshipped as the patron saint of Chinese builders and contractors.

#### The Logo

The logo "六" derives from the Chinese/Japanese character for the number '6'; Six beams are needed to construct a triangular pyramid, which is the primary construction of the house.



#### **Dedicated to architect Koen Limperg**

The Lu Ban House-concept is dedicated to the Dutch architect Koen Limperg (1908-1943) who, besides being a gifted artist, was also a member of the underground resistance during WWII. Koen Limperg's work was influenced by movements such as functionalism and the Modern Movement, and new ideas about standardization and efficiency. His unfortunately short pre-war career showed him to be a socially committed man. During World War II he decided to join the resistance around the sculptor Gerrit van der Veen and writer/painter William Arondéus and was as a final result of this executed by the Nazi's in the dunes of Overveen in 1943.