

## Chimney Flue for *Ume Kbubu* (Traditional Round Hut) of Timor Tengah Selatan, Indonesia



*Ume Kbubu* (traditional round hut of Timor Tengah Selatan Regency, East Nusa Tenggara Province)

### Scheme

Developmental model for a healthier and environmentally friendly traditional round hut (*ume kbubu*).

### Benefit

To obtain a healthier and environmentally friendly traditional round hut.

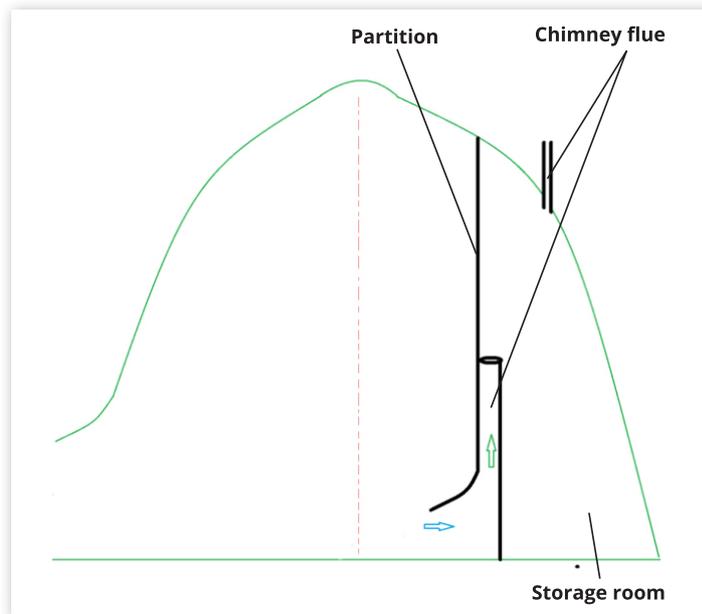
### Backgrounds

- Smoke from the furnace inside the round house was evidently becoming determinant for high morbidity and mortality rate of SARS in toddlers.
- Chimney flue could lower smoke level inside the round hut.

## Highlights

*Location:* Hoineno Village, Nunkolo Regency, Timor Tengah Selatan District, East Nusa Tenggara Province.

At the first stage, the furnace with chimney flue was installed while partition was created to separate the living room at the front side and storage room at the back. Smoke from the furnace was channeled through the chimney flue to preserve corn, candle nut, etc. in the storage room.



Sketch engineering of healthier round hut.

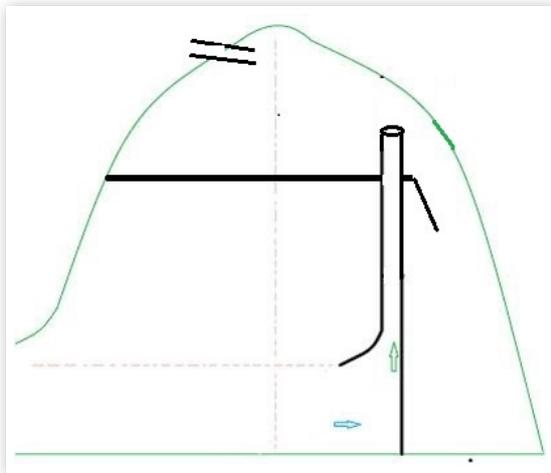


Furnace with chimney and partition

## Shortages

- Reducing space.
- Cost consuming especially for materials.

Based on the shortages, another design was build as an alternative using ceiling area as storage room.



Alternative model of furnace with chimney using ceiling as storage room.

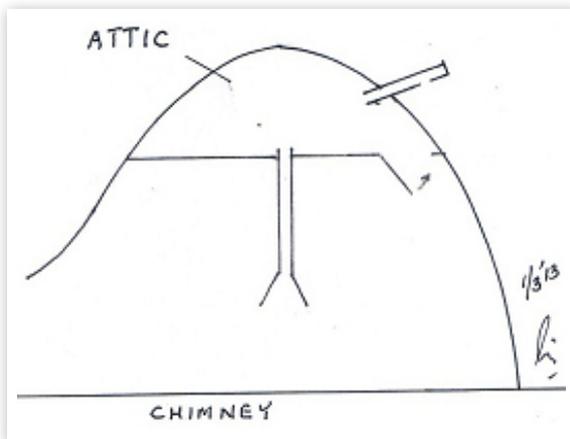


Chimney extension made from bamboo.

Objection:

Furnace with chimney was still reducing space for living room.

At the second stage, chimney flue was installed as complementary to the existing furnace (in the middle of the room).

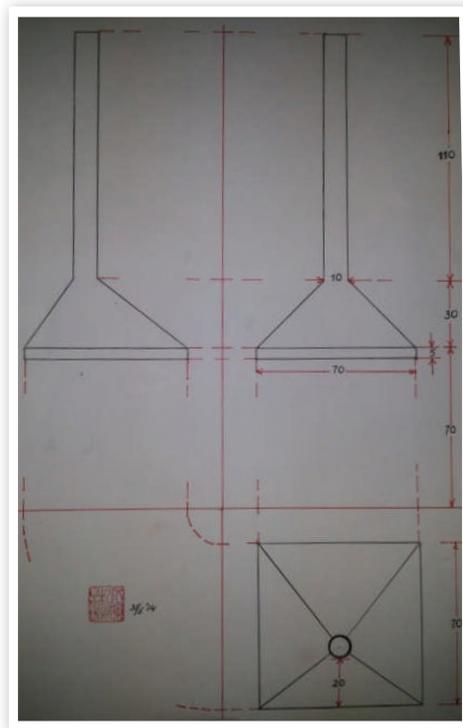


Chimney model as complementary to existing furnace.



Chimney flue with smoke chamber above existing furnace.

## COMMUNITY SERVICES PROGRAM



The dimension of chimney flue.



Community Engagement Team:

1. Rachmadhi Purwana
2. Budi Hartanto
3. Omega DR Tahun
4. Nasir Abidin

Contact: rachmadhi@hotmail.com