

RELATIONSHIP BETWEEN HOUSE AND MALARIA IN SUMBA TENGAH DISTRICT



**INTERNATIONAL
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BACKGROUND

Malaria is a systemic infectious disease caused by Plasmodium parasites, naturally transmitted through the bite of female Anopheles sp

In 2011 there were 216 million cases of malaria amounted to 655 thousand deaths.

Sumba Tengah District is one of the districts with high malaria morbidity rate in NTT



PROBLEM...??

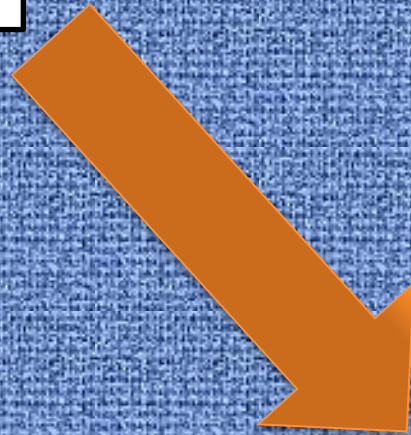
Most of people in Sumba Tengah still live in customary houses (traditional houses) by functioning them, among others, as cattle sheds.





- TYPE OF HOUSE
- HOUSE PHYSICS CONDITION

??



MALARIA





METHOD

case control

RISK
FACTOR +

RISK
FACTOR -

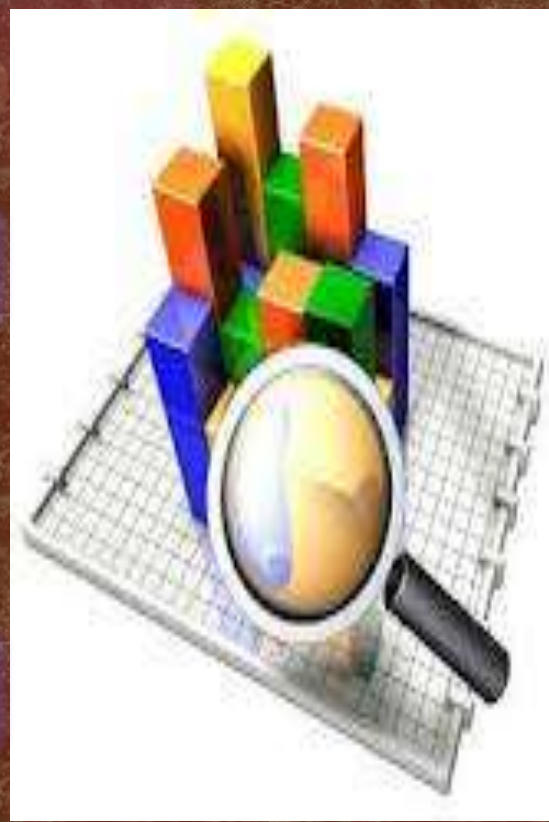
CASE
(EFFECT +)

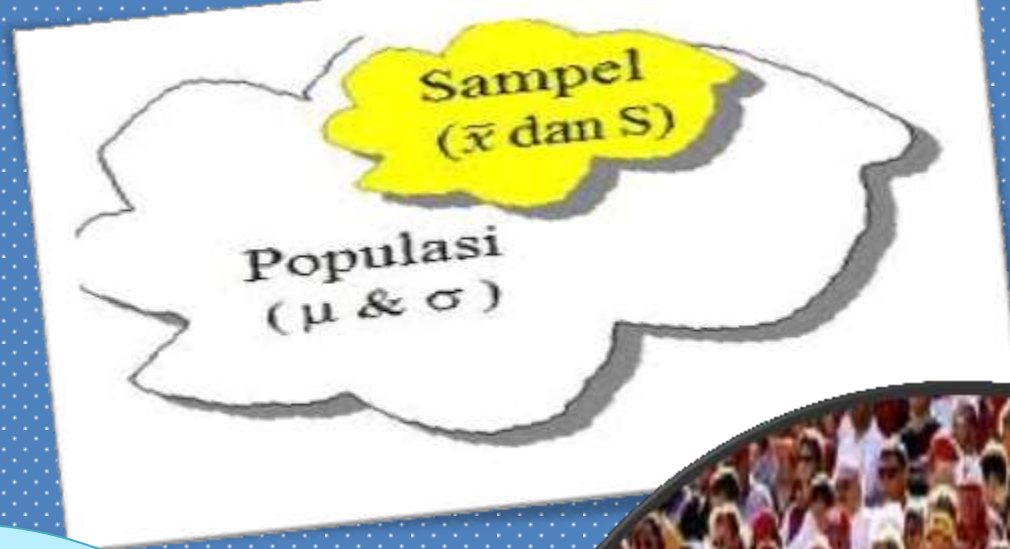
RETROSPECTIF

RISK
FACTOR +

RISK
FACTOR -

CONTROL
(EFFECT -)





56+56 =
112
SAMPLES



A N A L Y Z E

Null
Hypothesis
(H_0) was
tested with a
significance
level of $\alpha =$
0.05



Chi-square test
 $\rightarrow p < 0,05$
OR \rightarrow To
determine the
effect

Netted vents
OR: 4,221

Density of
walls and
floor
OR: 3,519

Type of
house
OR: 3,824

MALARIA

Cattle sheds
OR: 4,129

Presence of
ceiling
OR: 3,922



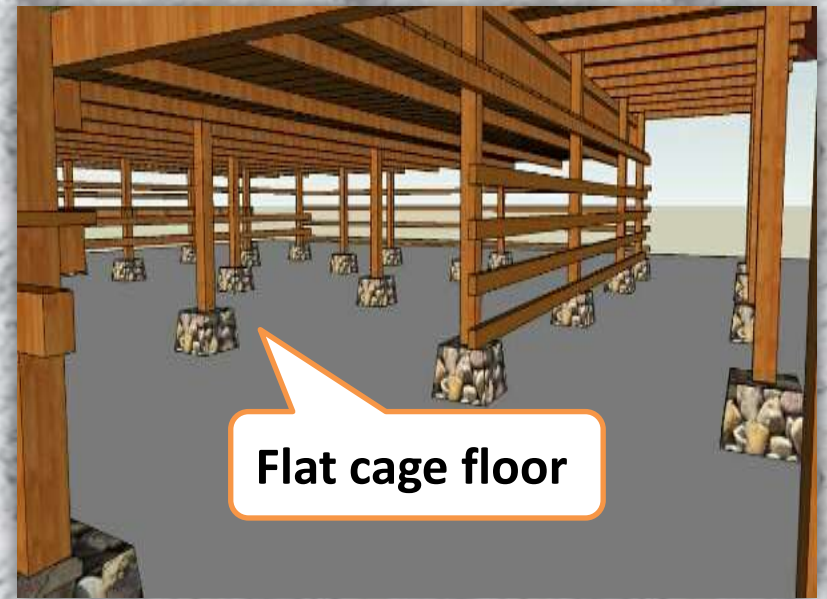
Not installed netting on windows



Poor density of walls



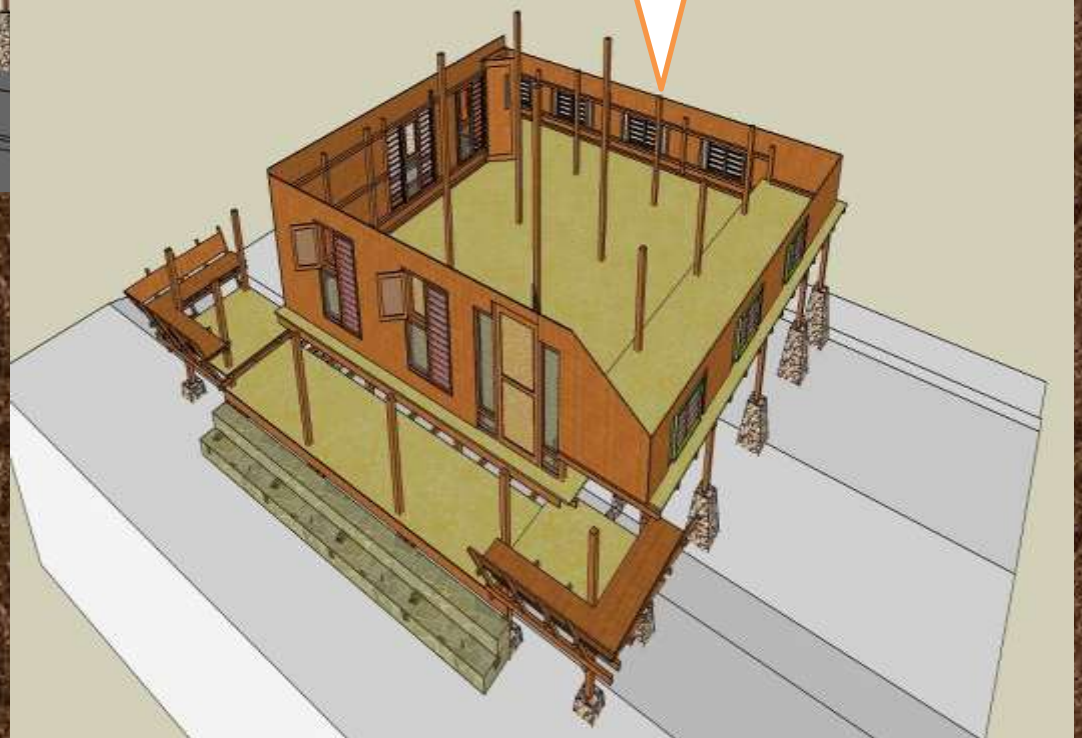
There is a space of walls and roofs



Flat cage floor



Modification of Sumba traditional house on given window gauze, the density of walls and floors

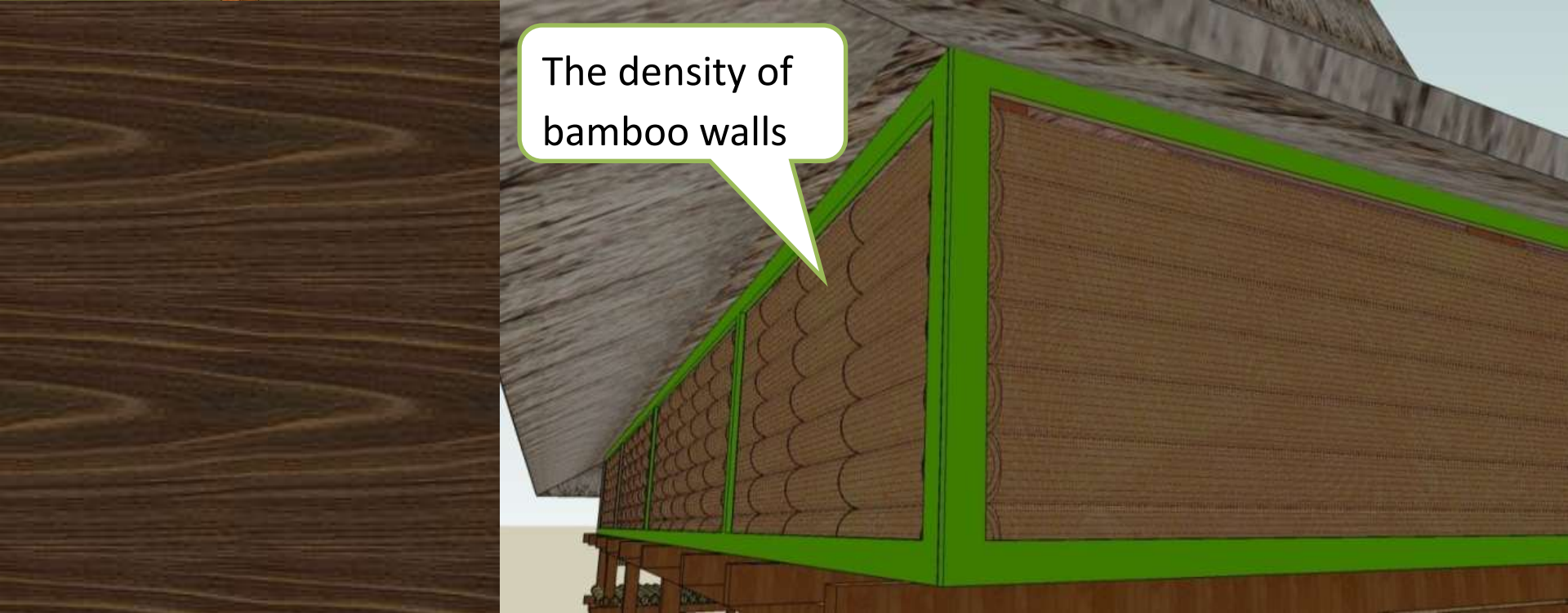


Modification of Sumba traditional house on the walls, doors, windows, and cattle sheds



Window
with gauze

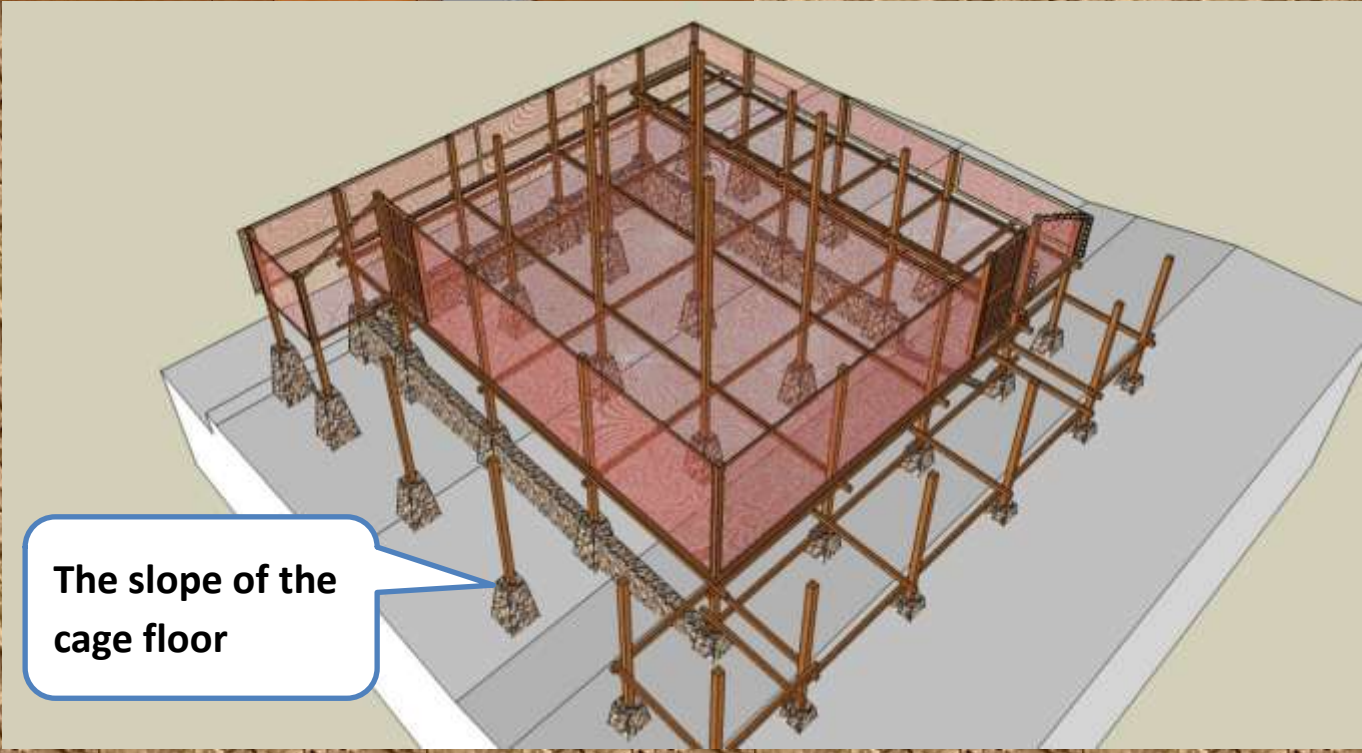
Door with gauze



The density of
bamboo walls



There is no space between wall and roof



The slope of the cage floor

CONCLUSION

The incidence of malaria in the work area of Wairasa Health Center had a relationship with the type and physical condition of the house. People who lived in the traditional house made of wood/bamboo, thatched with reeds and open physical conditions had risks of malaria.

RECOMMENDATION

Housing conditions should be modified / tricked to reduce contact with mosquitoes; cattle sheds around the house must be cleaned periodically to control mosquito breeding places.

Interdisciplinary cooperation should be applied to solve the problem of malaria

TERIMA
KASIH!

