

LBC

Local Building Cultures

DISSEMINATION WORKSHOP

NAIROBI

6TH SEPTEMBER

Local Building Cultures

Building system and architecture typologies



Morocco



Philippines



India



Turkey



Haïti



Island

Local Building Cultures

Same material? ; Different shapes and architectures



Greece



Mali



New Mexico



Saudi Arabia



France



Bangladesh

Local Building Cultures

Houses
Commercial building
Public building



Haïti

Related to technical and financial capacities

Local Building Cultures



Integrate challenges from local environment, even the worst...



Integrate challenges from local environment, even the worst...

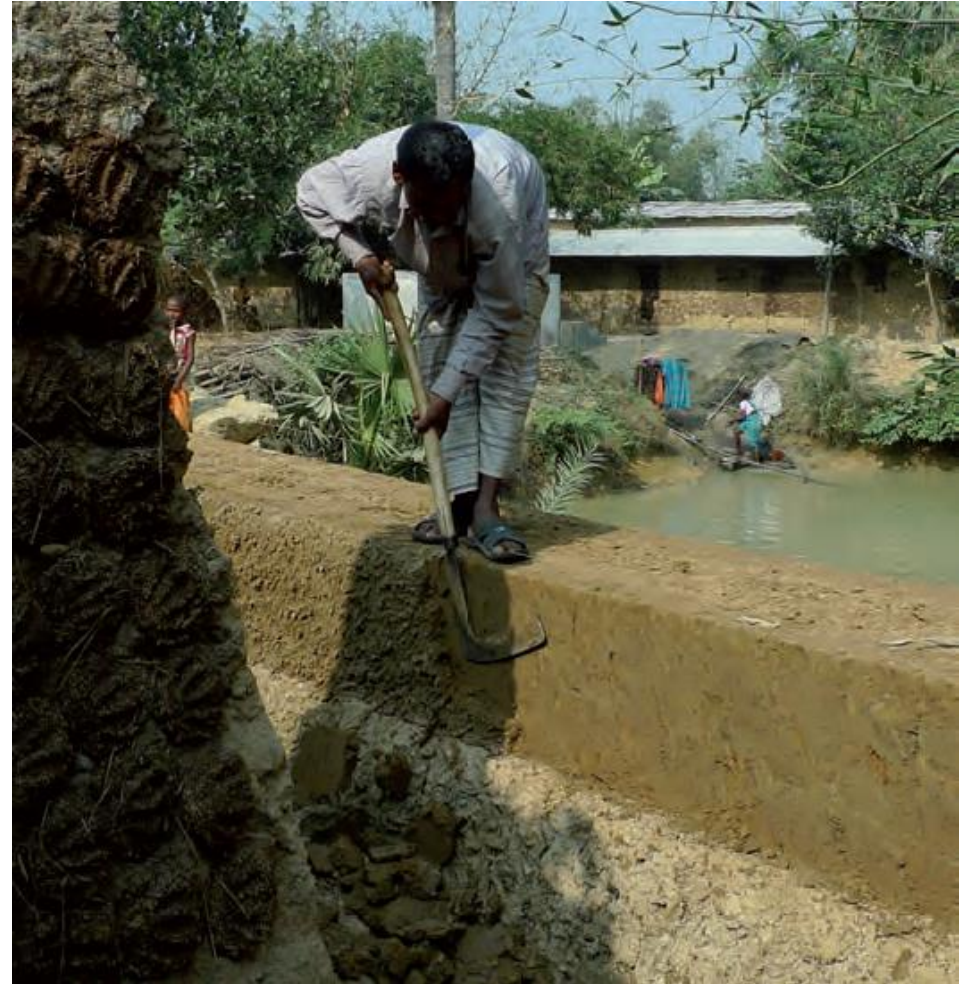
Local Building Cultures; A base for sustainable LRRD housing project





Result of socio-cultural aspect

Local Building Cultures

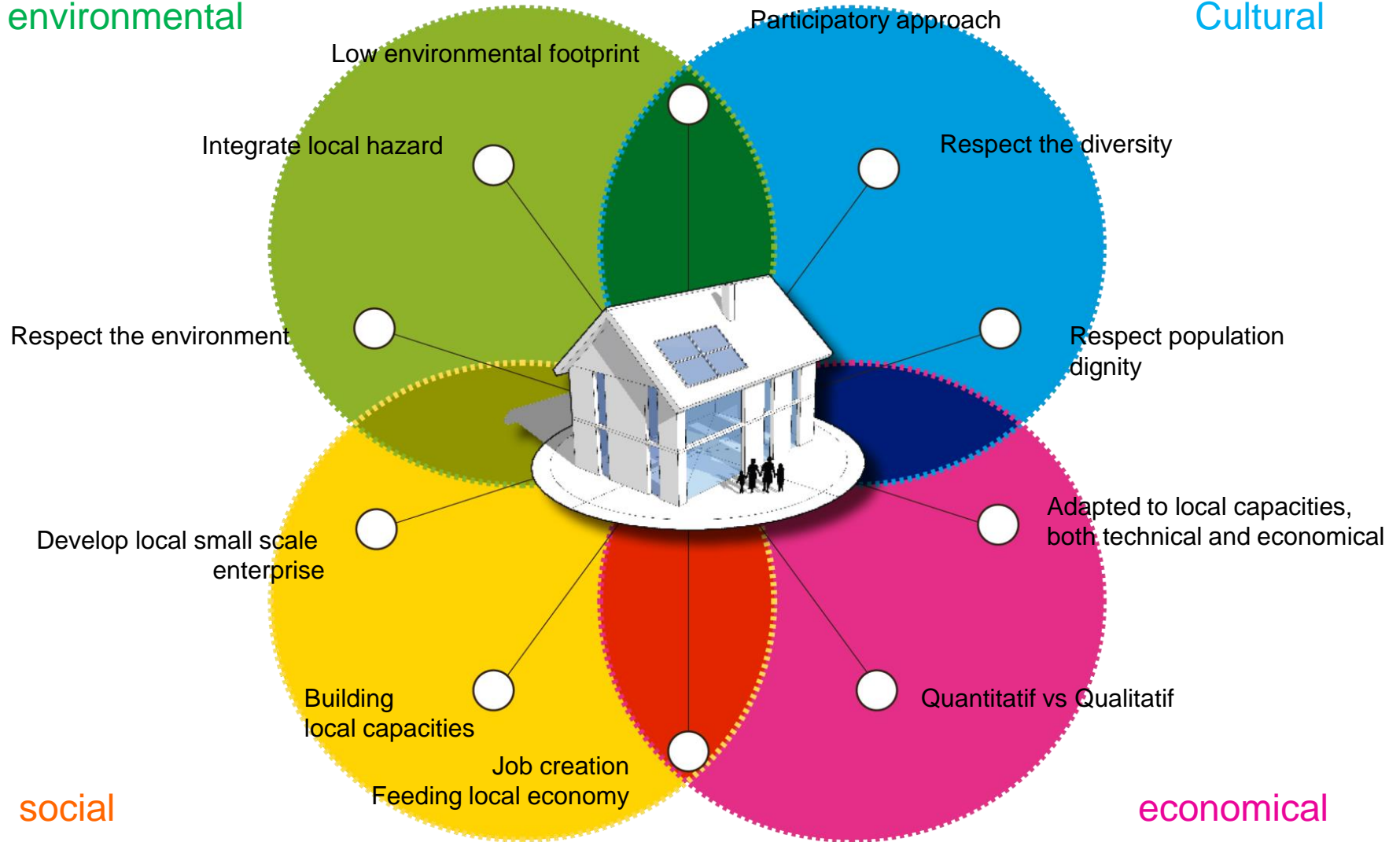


Linked to socio economic aspects

Local Building Cultures

environmental

Cultural



social

economical

Local Building Cultures



India



New materials



Banladesh



New Know how

Local Building Cultures



Learning from experience.

Local Building Cultures

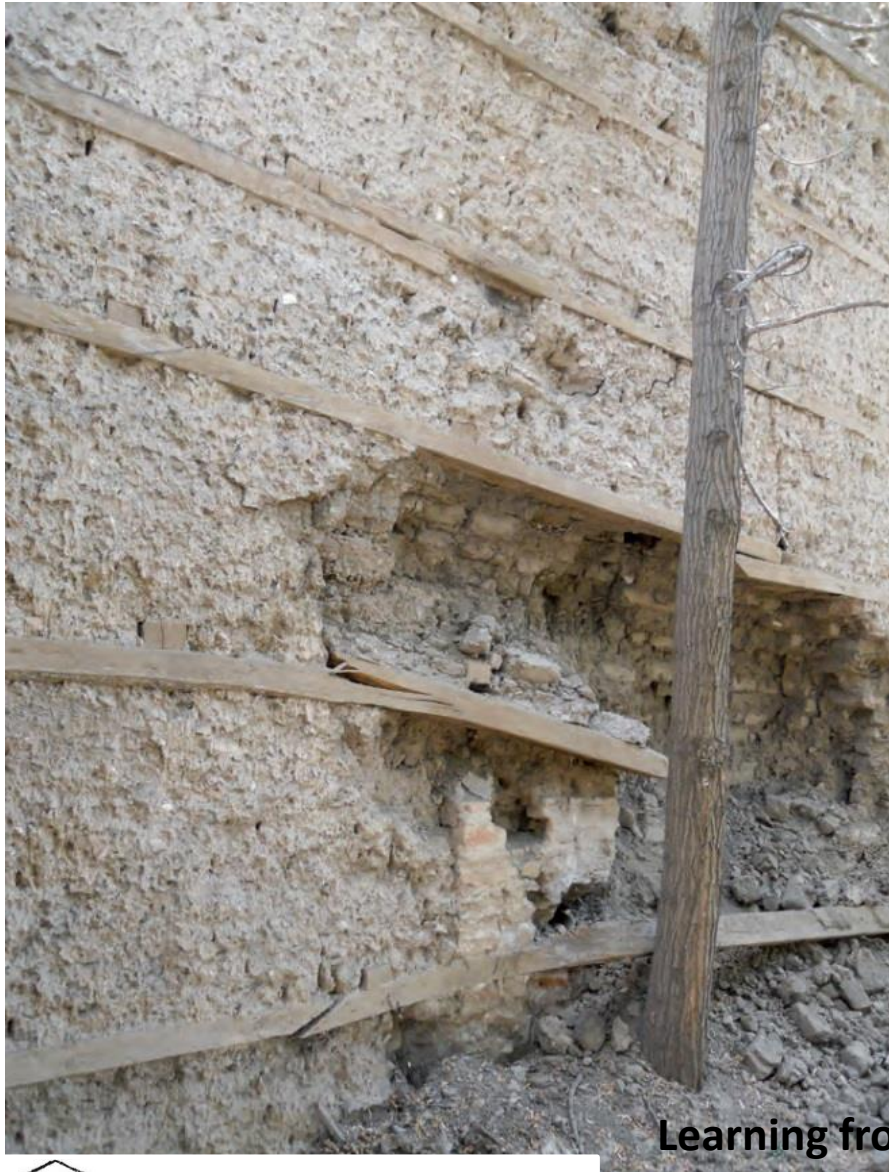


Learning from experience.



Learning from experience.

Local Building Cultures



Learning from experience.

Local Building Cultures



Learning from experience.



Learning from experience.

Introduction to earth and construction

TECHNICAL WORKSHOP
MOGADISHU
AUGUST 31ST

Introduction to earth and construction

Italie



Mali



Perou



Afghanistan



Espagne



Venezuela



Népal



France



Portugal



Mayotte



Burkina Faso



Arabie



Etats- Unis



Nigéria



Australie



Yémen

Afrique du sud

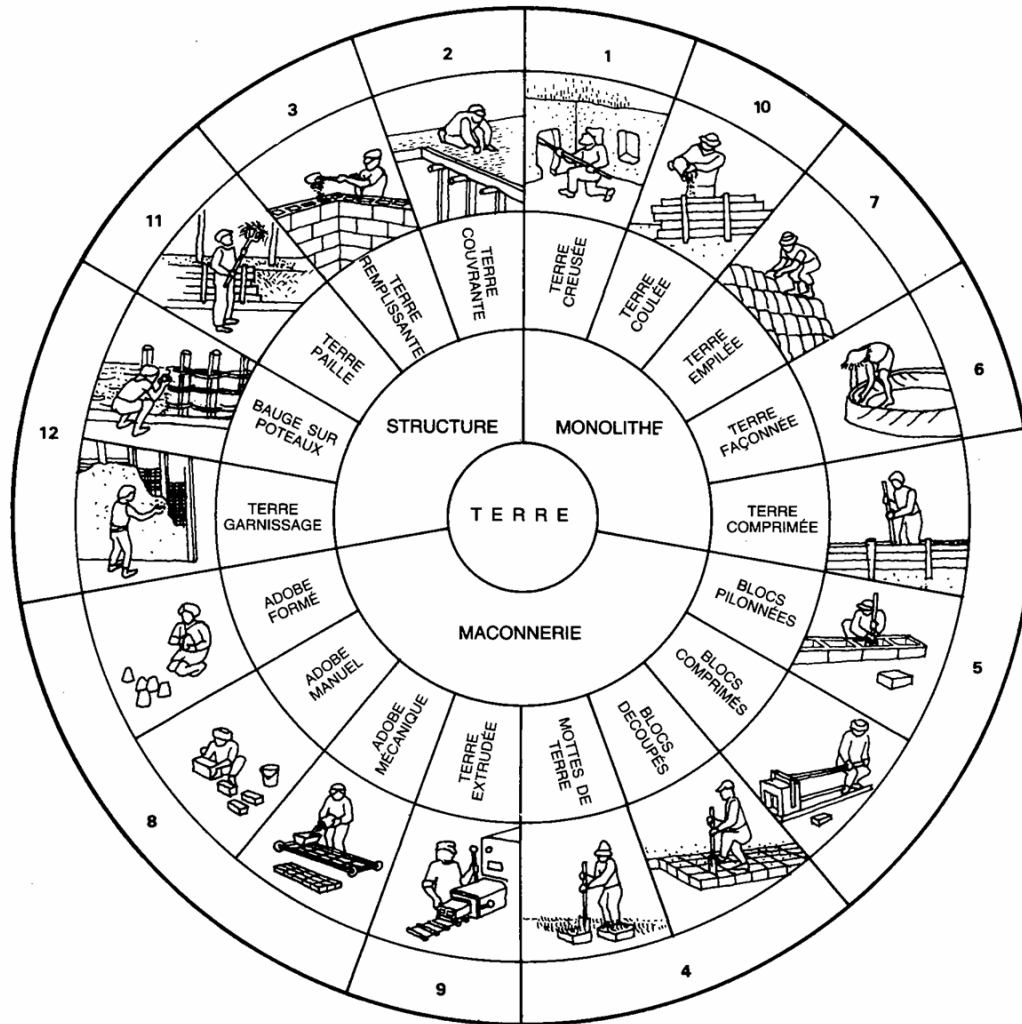


Cameroun



Iran

Introduction to earth and construction





Introduction to earth and construction







Introduction to earth and construction













Local Building Culture & Building Back Safer

TECHNICAL WORKSHOP
MOGADISHU
31ST AUGUST

EARTH CONSTRUCTION AND BUILDING BACK SAFER

**TO BETTER UNDERSTAND HOW WE
CAN IMPROVE LOCAL BUILDING
CULTURES, WE NEED TO BETTER
UNDERSTAND OUR MATERIALS...**

EARTH IS A MIX OF WHAT?

EARTH IS A MIX OF WHAT?

-Organic material

-Silt

-Clay

-Sand

-Aggregates

**ALL MATERIALS NEED BINDERS
TO KEEP THEM TOGETHER?**

**CEMENT IS A GREAT BINDER, BUT
SO IS CLAY, BUT THEY DON'T
WORK TOGETHER...**



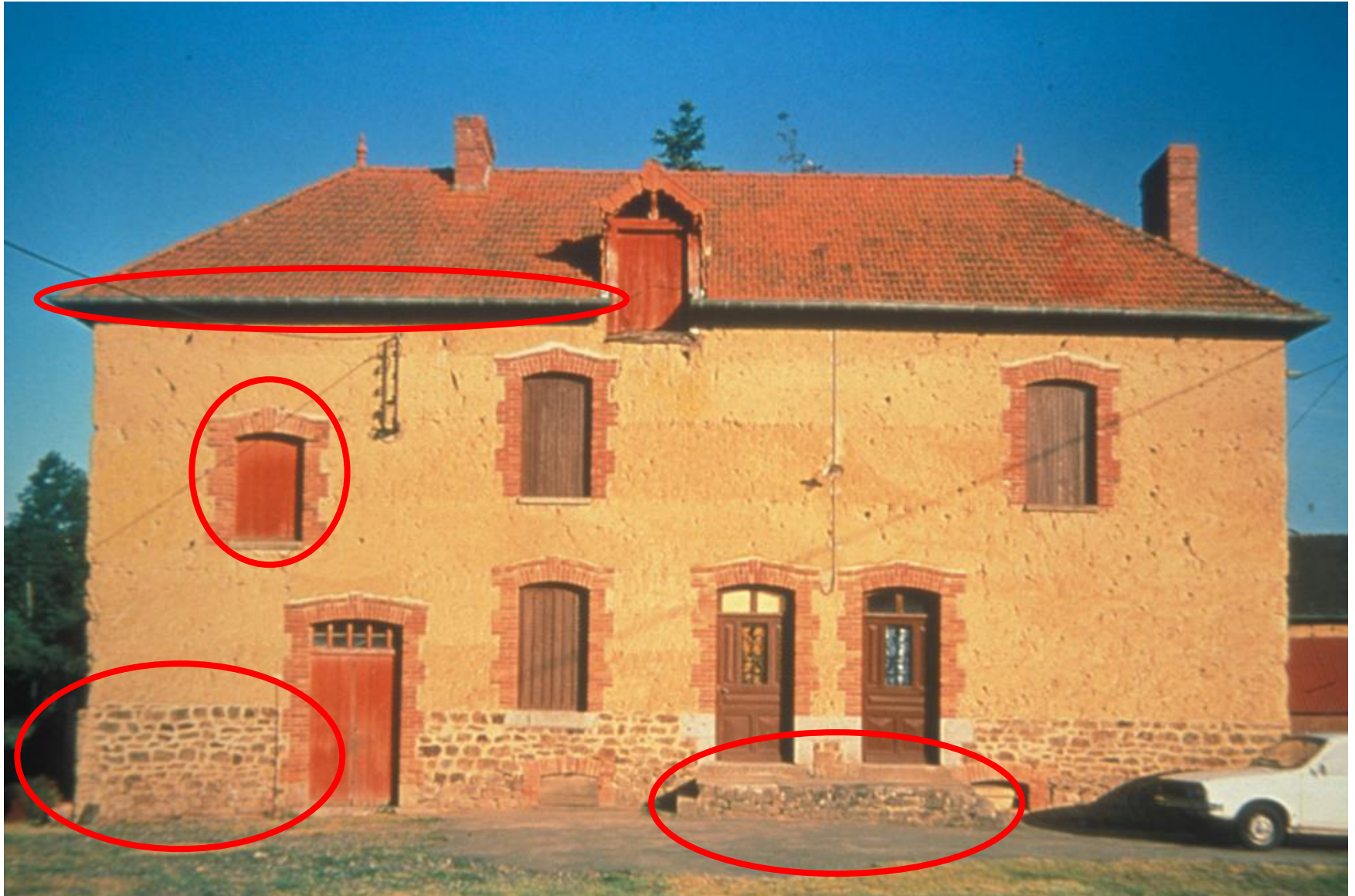
EXPANSIVE AND NON-EXPANSIVE CLAYS

WHY DO WE NEED TO THINK OF BUILDING BACK SAFER IN EARTH CONSTRUCTION?

WHAT DO YOU SEE HERE?



Learning from experience.





**OFTEN IT IS STRAIGHT
FORWARD...**

Earth Architecture; Building Back Safer





EARTH CONSTRUCTION

DIFFERENT FOUNDATION TECHNIQUES

Earth Architecture; Building Back Safer





ADOBE FOUNDATION



Fill the excavation with layers of no more 20 Cm at each time



Ram properly each layer up to the ground level



Prevent risk of water evaporation by covering the foundation with soil.

Earth Architecture; Building Back Safer



Stone and aggregate locally available

Select stone size

Organize the stone in the foundation



FOUNDATION WITH INERT STONES



FOUNDATION WITH NATURAL ROCK



FOUNDATION WITH STABILIZED SOIL BLOCKS



FOUNDATION WITH CEMENT BLOCKS

EARTH CONSTRUCTION

THE IMPORTANCE OF WATER BARRIERS

Introduction to earth and construction



Earth Architecture; Building Back Safer







Water resistant / Water absorbent material:

Sand / cement blocs...mortar...

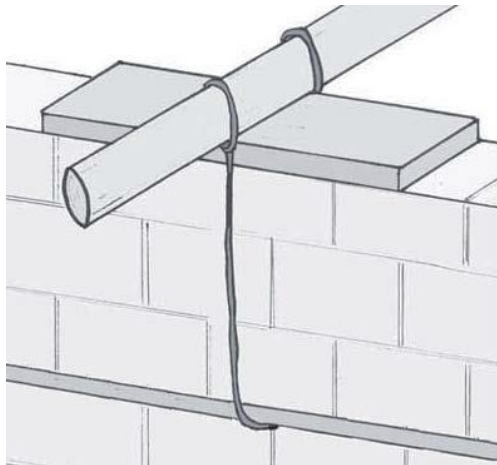
EARTH CONSTRUCTION

BUILDING A ROOF, TIE BEAMS AND
CONNECTING IT TO THE
SUPERSTRUCTURE

Earth Architecture; Building Back Safer



Earth Architecture; Building Back Safer



Earth Architecture; Building Back Safer



EARTH CONSTRUCTION

DOOR AND WINDOW OPENINGS
CORNERS OF HOUSES

Earth Architecture; Building Back Safer





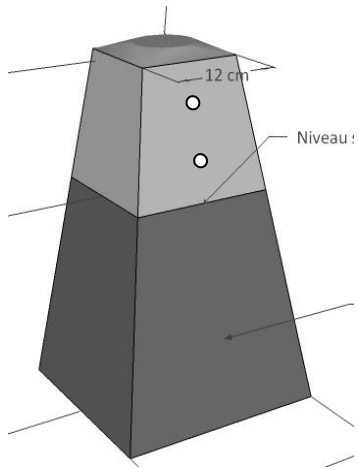
Earth Architecture; Building Back Safer



Earth Architecture; Building Back Safer



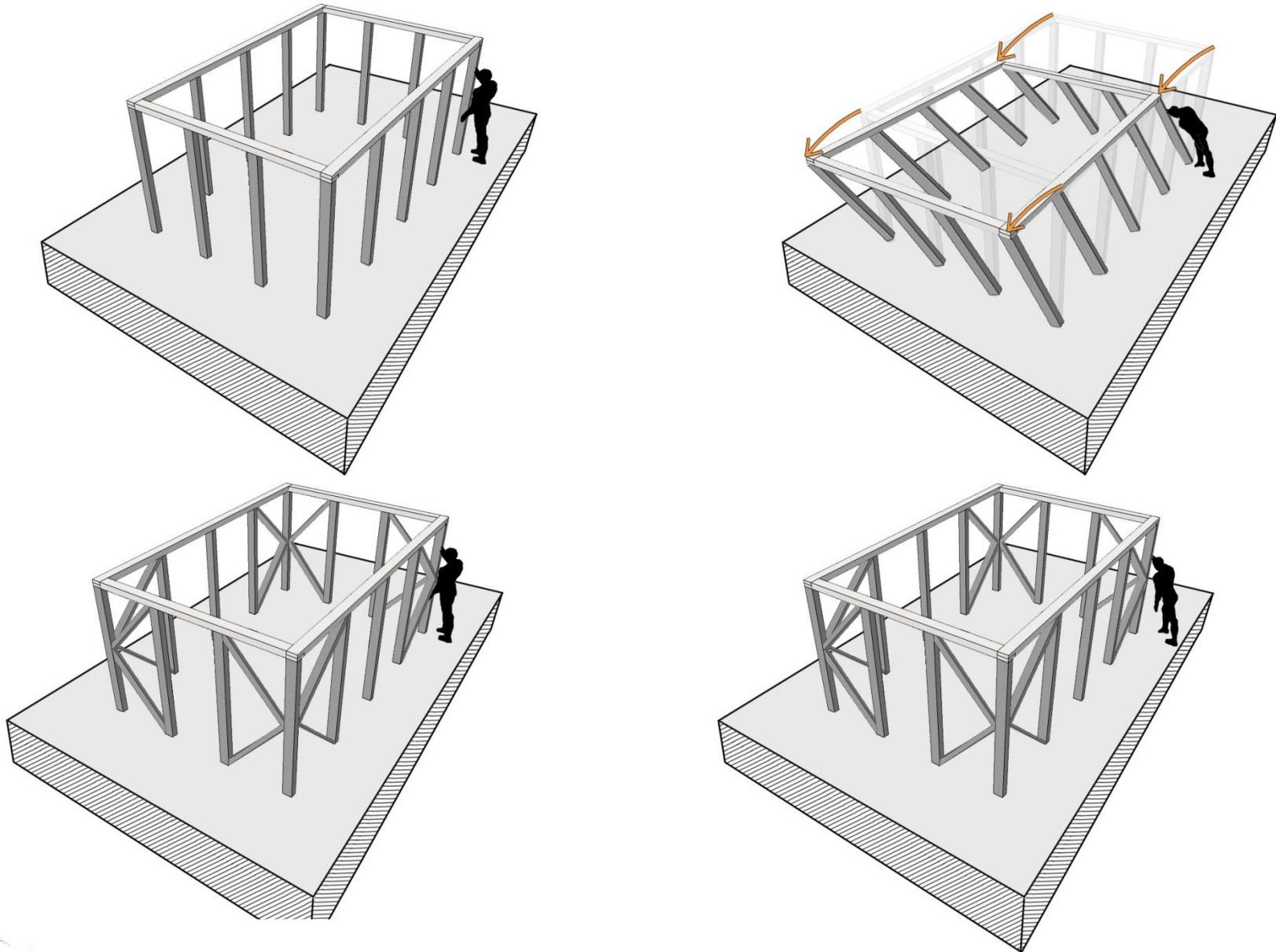
Earth Architecture; Building Back Safer



OTHER LOCAL BUILDING CULTURES

WATTLE AND DAUB = CHARISH
WITH IMPROVED FOUNDATIONS

Building Back Safer



Earth Architecture; Building Back Safer



Earth Architecture; Building Back Safer





Earth Architecture; Building Back Safer



Earth Architecture; Building Back Safer



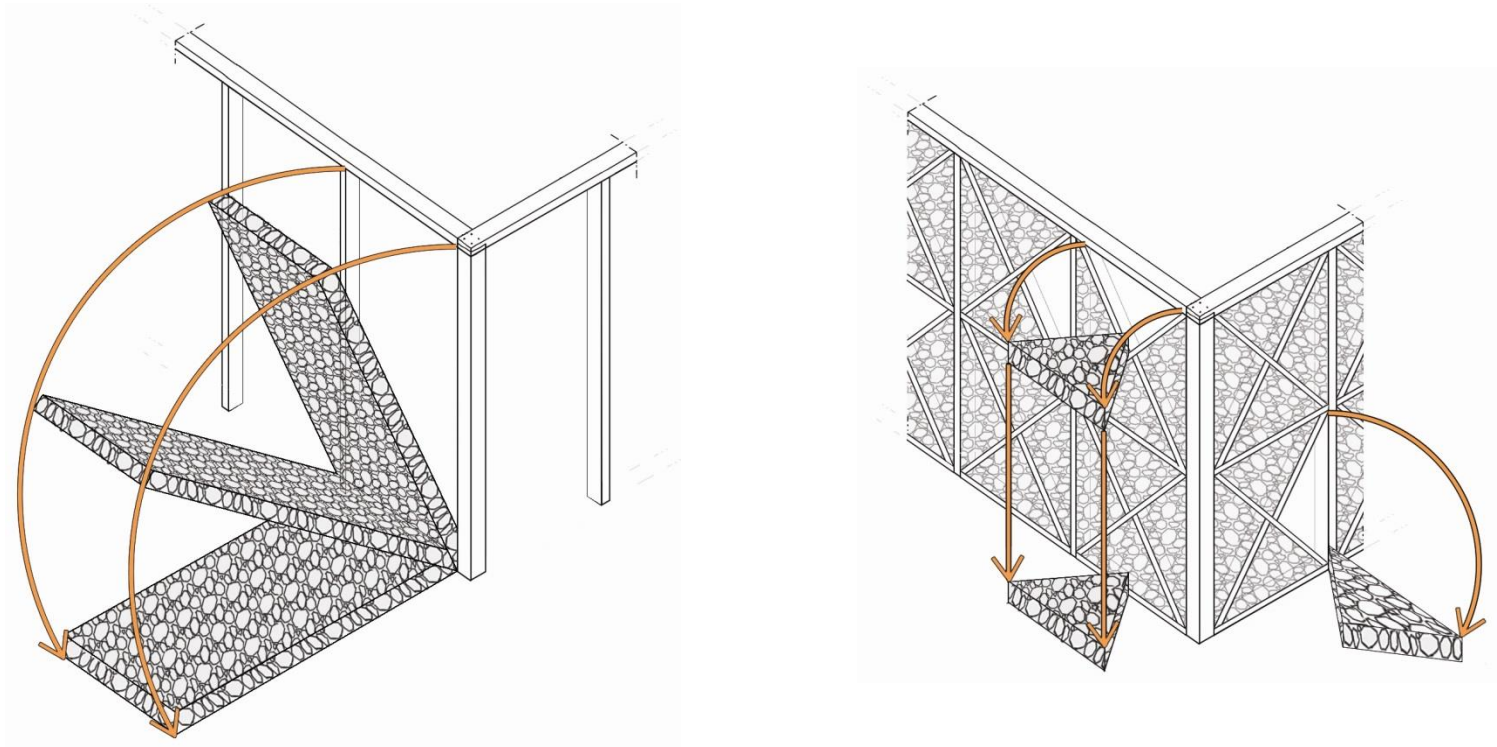
Earth Architecture; Building Back Safer



OTHER LOCAL BUILDING CULTURES

WOODEN FRAME WITH
STONE FILLING

Building Back Safer



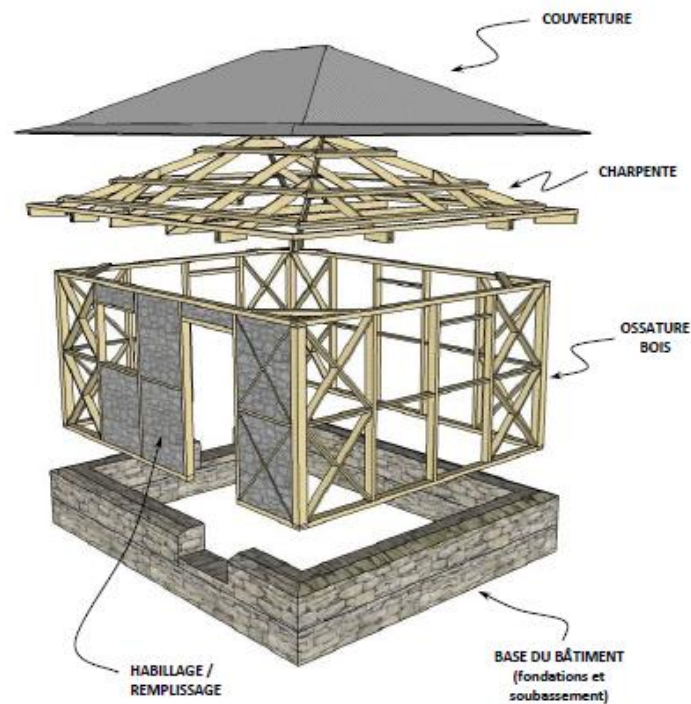
Building Back Safer

M7 – 7.1

Système constructif – Description générale

Fiche info 2

Les différentes parties - Vue 3D

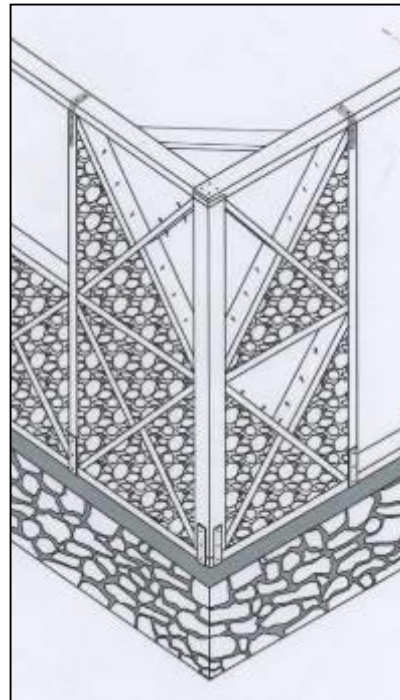


ONU HABITAT
POUR UN MONDE MEILLEUR AVEC UN LOGIS

180/308

CRAterre

Building Back Safer



Building Back Safer



How to improve the roof resistance to strong wind



**THANK YOU AND I HOPE YOU
WILL NOW ALSO BUILD WITH
LOCAL RESOURCES...**

DISSEMINATION WORKSHOP
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6TH SEPTEMBER