### SOIL SUITABILITY

#### The Raw Material
- Organic soil present in the topsoil is not suitable for CEB
- Don’t use the topsoil
- Use the subsoil
- Don’t use the rock
- Remove the topsoil and use it for application
- A soil is an earth container: Sand contains gravel, sand and silt particles which are not all going to the bottom of the earth, but not all go below the water. They can be stabilized.

#### Soil Stabilization
- 15% gravel
- 50% sand
- 15% silt
- 20% clay
- The mix 1:6:6 is OK

#### A good soil for CEB is more sandy than clayey or silty
- Almost every soil can be used
- Try 1 cement + 8 soil + 4 sand
- Try 1 cement + 7 soil + 5 sand

### PRODUCTION

1. **Stirring the Soil**
   - Measure all components directly in the containers (recommended for soil, cement for sand and cement)
   - Fill the containers with accuracy, as per specifications

2. **Moulding**
   - Every block of every mix must be checked
   - Packet peenimeter for the compression strength
   - Block height gauge for the height

3. **Quality Control**
   - Every block of every mix must be checked
   - Pocket peenimeter for the compression strength
   - Block height gauge for the height

4. **Stacking the Fresh Block**
   - The pile must remain covered 2 days with a plastic sheet
   - Cover immediately every row with a plastic sheet

5. **Final Curing and Stacking**
   - Water the pile daily (on top and on the 4 sides), as many times as needed, for 1 month
   - Never let the pile dry for a full month

### MASONRY

- The course must be hand
- Use a piece of hose pipe, which is soaked in water
- The pointing must be done every day after laying the blocks
- Poultice effect
- A good soil with good exchanges
- RCC mixes in a Globals

### GUIDELINES FOR A VILLAGE HOUSE
- A 4×4 block with 4×4 joint
- RCC mixes in a_globals
- A 4×4 block with 4×4 joint
- A well-ventilated house - all the rooms connected
- RCC mixes in aGlobals
- A 4×4 block with 4×4 joint
- A well-ventilated house - all the rooms connected
- RCC mixes in aGlobals

### COMPRRESSED EARTH BLOCKS (CEB)

#### Applications of Compressed Earth Blocks
- Foundation, staircases, doors, windows, walls, floors, etc.
- Not for civil slabs
- Not for structural members
- Soil Stabilization for Durability
- The strength of CEB is often better than country fired bricks

#### Local Material for Reducing Imports
- CEB production is ideally made on the construction site itself

#### Limiting Reactions, No Need of Filming
- CEB are often stabilised with cement or lime. Thus, no filming is required, but curing is necessary for a month

#### More Eco-Friendly Than Mud Bricks
- More than 3 times energy savings
- 4 times less pollution

#### Cost-Saving:
- CEB are most of the time cheaper than conventional materials

#### A New Market Opportunity:
- Possibility to uplift labour skills and to offer a new product
- A new market in the fight against floods

#### Need of a Proper Soil Identification:
- It is essential to know before starting a production what to do

#### A Local Material for Reducing Imports:
- Possibility to uplift labour skills and to offer a new product
- Need to Manage the Soil Resources:
- It is essential to know before starting a production what to do