



PRODUCTION AND STORAGE OF FEED AND FODDER

DEPARTMENT OF LIVESTOCK
PRODUCTION MANAGEMENT

SUBMITTED BY DR. ABHISHEK SAINI | SUBMITTED TO B.V. SC. & A.H. 1ST YEAR



THE BRIDGE BETWEEN HARVEST AND FOOD SECURITY

Storage is the vital link in the marketing, distribution, and food security system. It protects the investment made during production.

Contextual Shift: Rapid evolution from public to private management due to trade liberalization.

THE AGENTS OF DETERIORATION



TEMPERATURE



MOISTURE



INSECTS



FUNGUS



RODENTS

SAFETY THRESHOLD:

Insects cannot develop below 10°C.
Moisture must be below 9%.

DIAGNOSING STORAGE FAILURE



SMELL: Operate aeration systems. Check air for spoilage odors.



SIGHT: Inspect under grain for “powdery material” (insect activity).



TOUCH: Check for ‘hot spots’ indicating high biological activity.

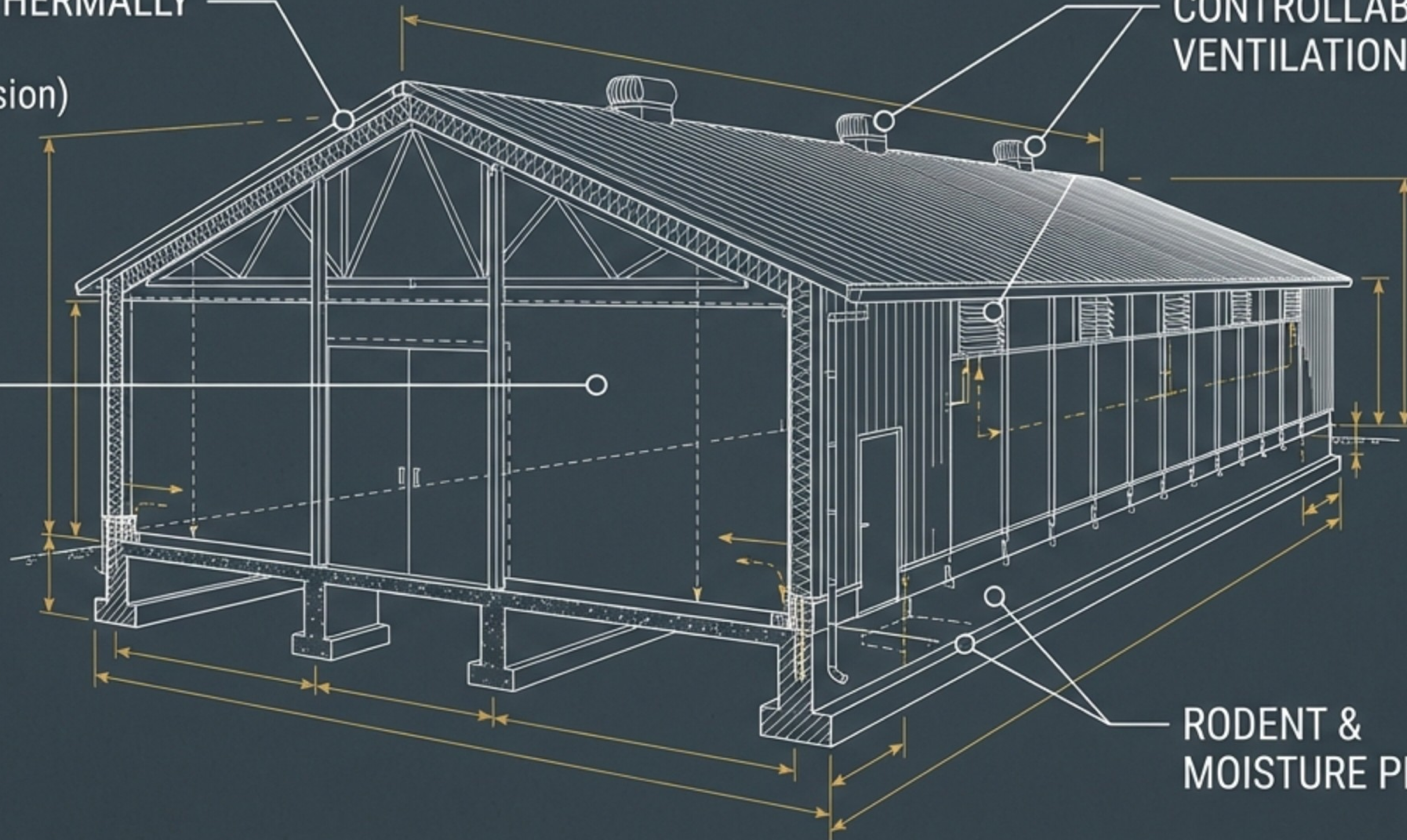
THE BLUEPRINT FOR PROTECTION

WATERTIGHT & THERMALLY CONTROLLED
(No light transmission)

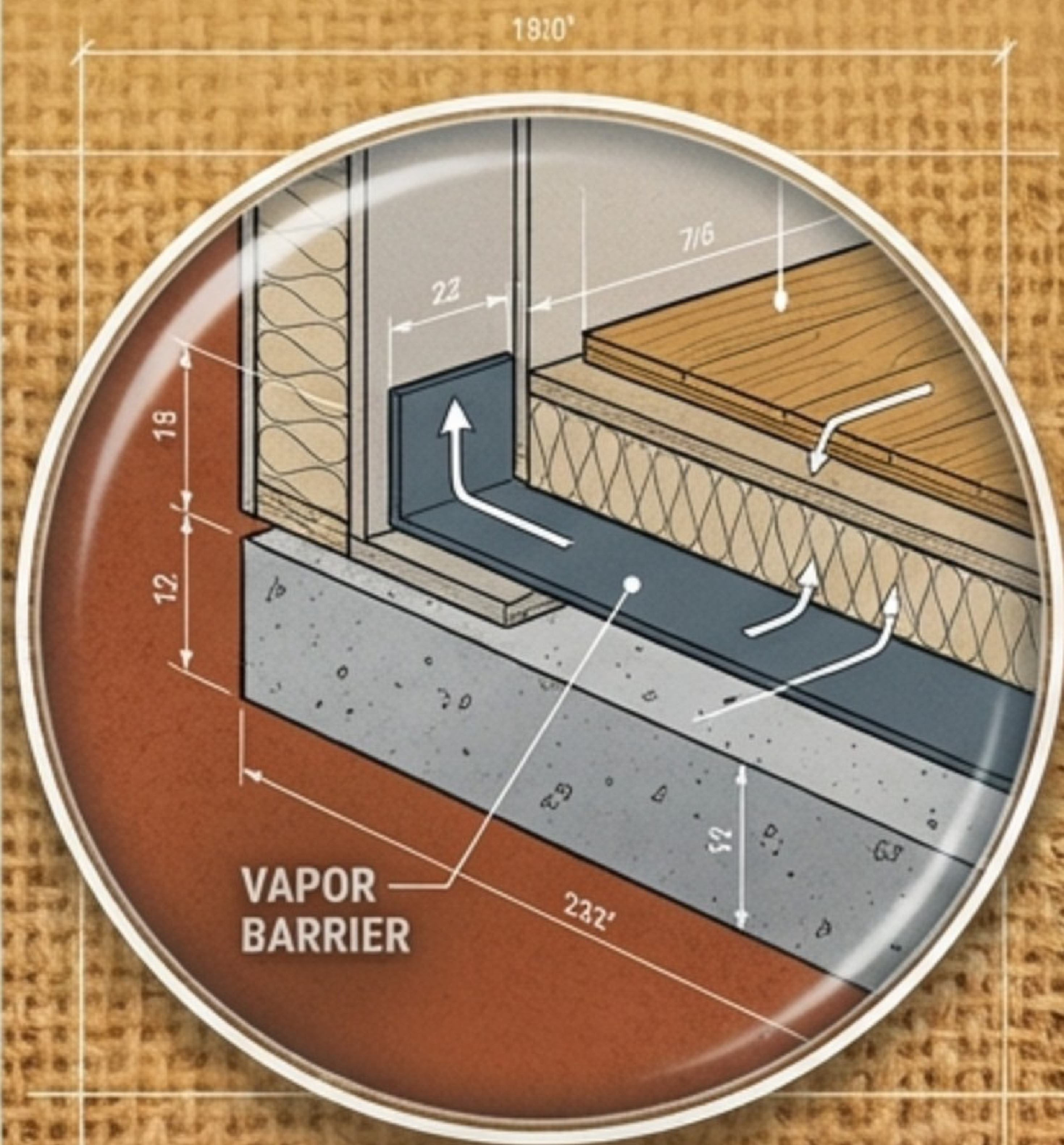
CONTROLLABLE VENTILATION

GAS-TIGHT
(For fumigation)

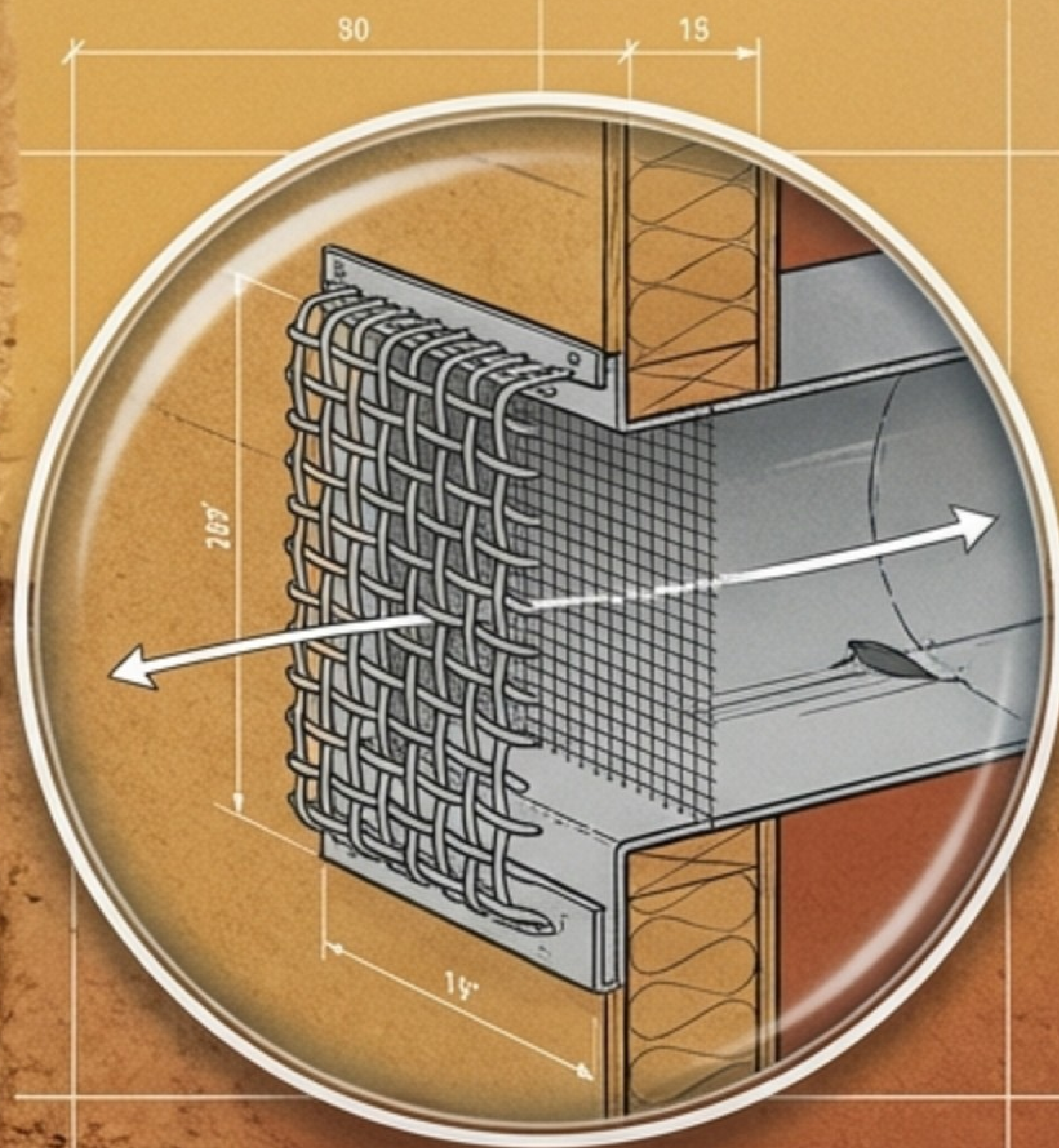
RODENT & MOISTURE PROOF



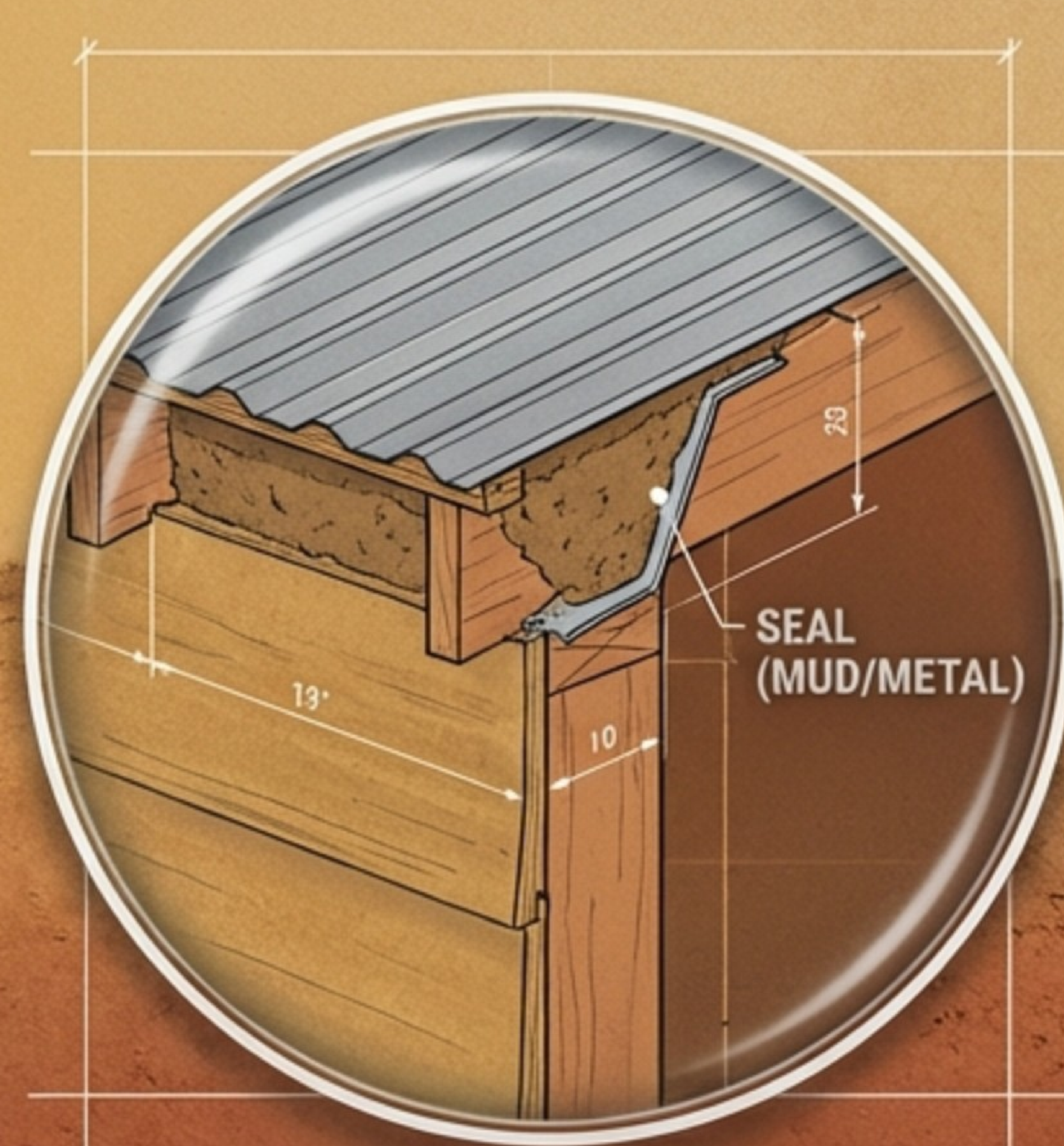
FORTIF FORTIFYING THE WEAK POINTS



FLOOR:
Vapor Barrier
required.



OPENINGS:
Metal guards
and netting.



SEALS:
Mud or metal to
block gaps.



70%

**OF FARM PRODUCE IS
STORED BY FARMERS**

Local Resources:
Mud,
Bamboo,
Stones,
Plants.

VULNERABILITY: Often not rodent-proof or fungal-resistant.

THE FIRST LINE OF DEFENSE: JUTE BAGS

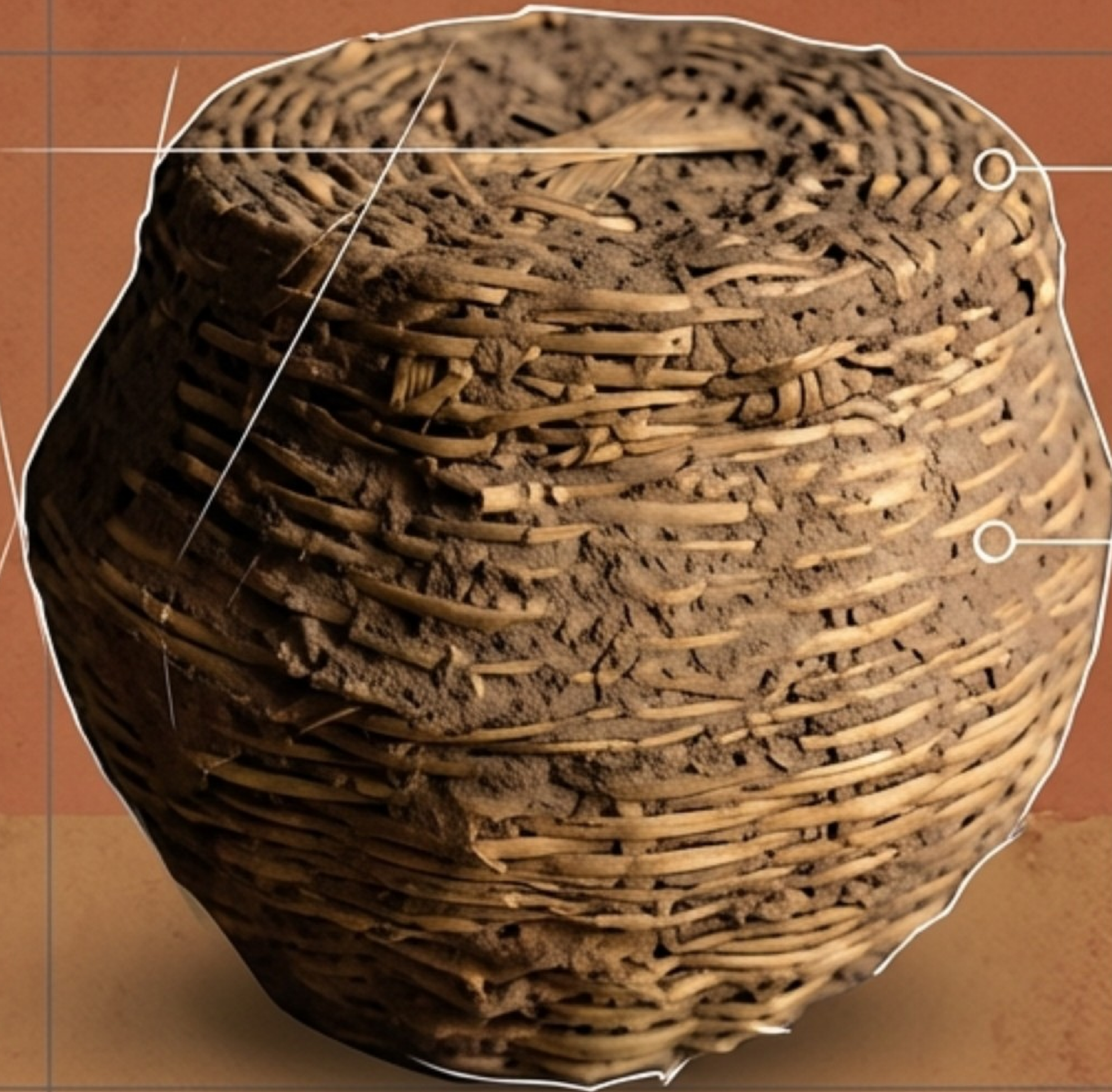
THE UPGRADE:
Plastic sheet lining
makes it insect-proof.

OFF THE GROUND:
Prevents seepage
& termites.



INDIGENOUS ENGINEERING: THE PERI

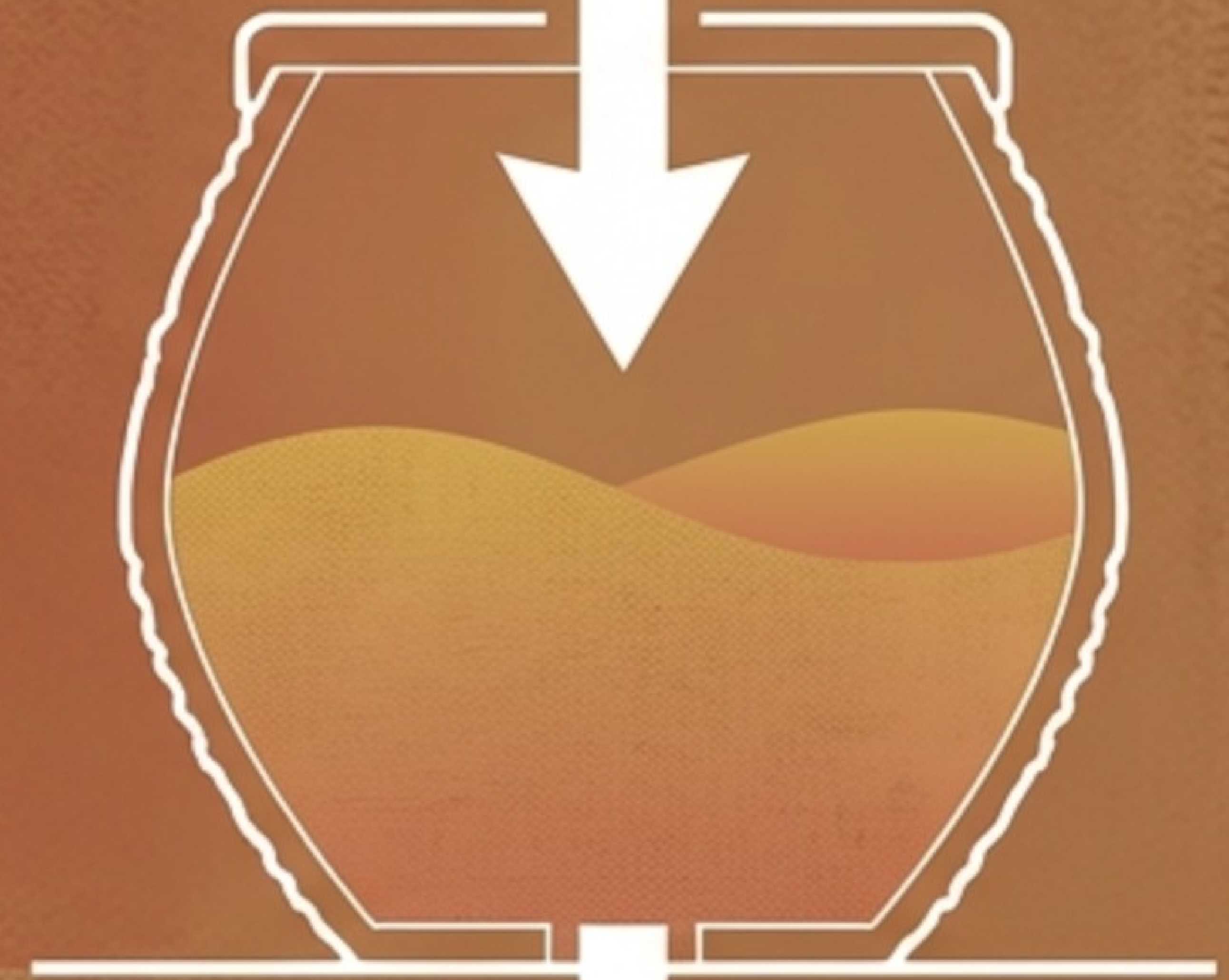
Himachal Pradesh | Bamboo plastered with cow dung & clay.



BAMBOO
FRAMEWORK

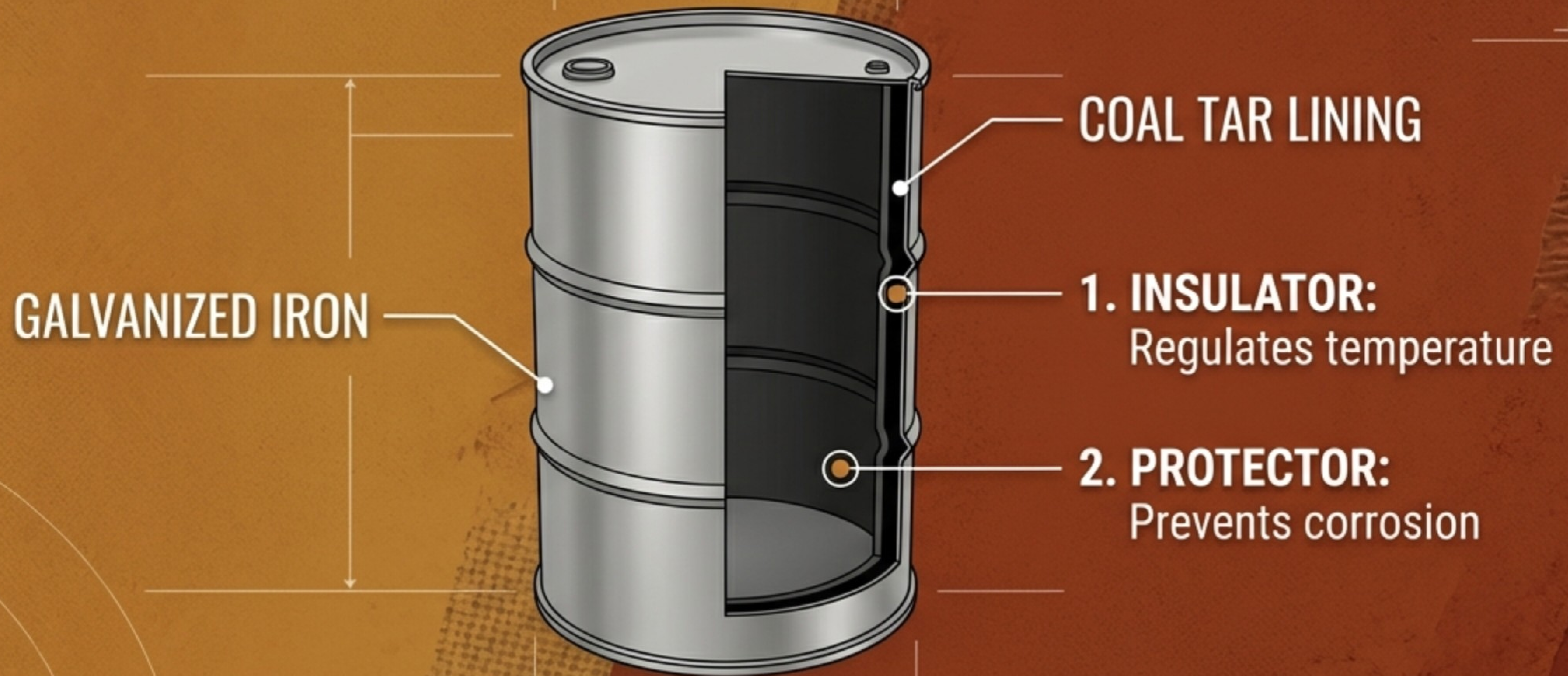
COW DUNG &
CLAY PLASTER

LOADING
(from 1st Floor)



UNLOADING
(Gravity Feed)

THE IRONCLAD OPTION: COAL TAR DRUMS



VERDICT: Rodent-proof, Insect-efficient, Water-sealed.

UPGRADING TRADITION: THE LINED BAMBOO BIN

Modification: Lining porous bamboo bins with polyethylene transforms them into moisture-resistant, effective storage.

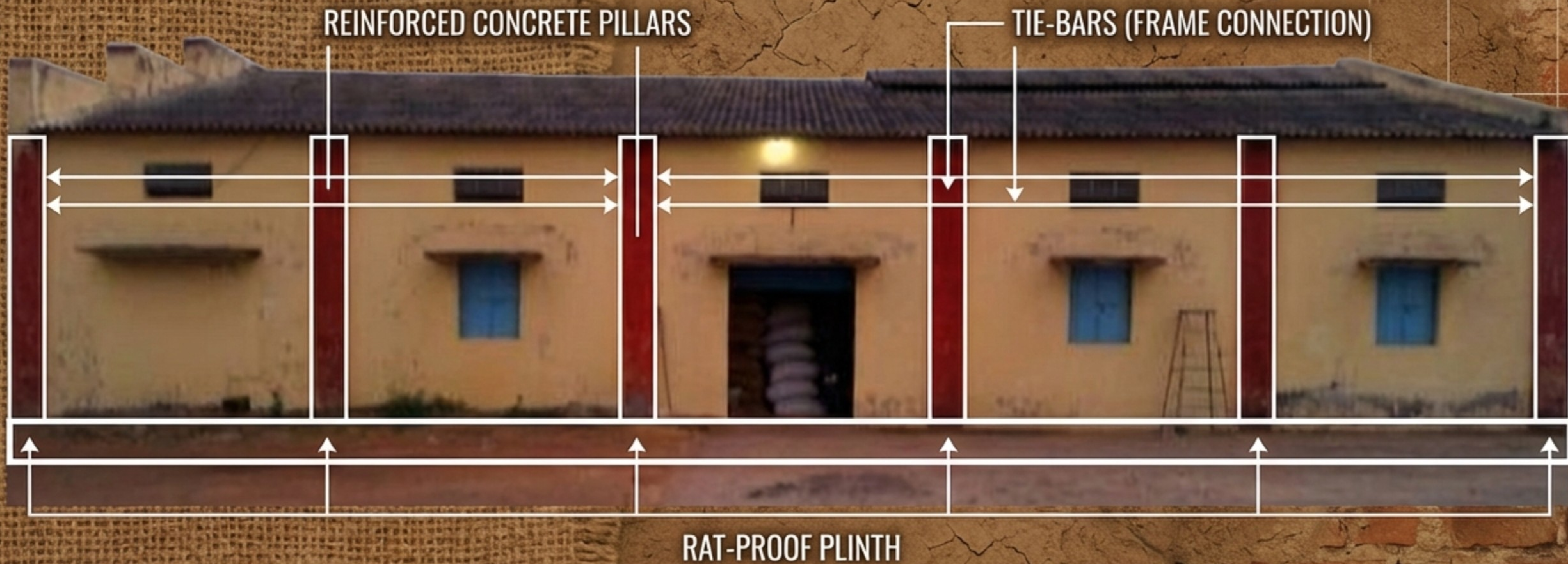
TRADITIONAL BAMBOO
(POROUS)



POLYETHYLENE LINER
(MOISTURE-RESISTANT)

SCALING UP: BRICK-BUILT GODOWNS

Reinforced concrete framework for bulk storage.

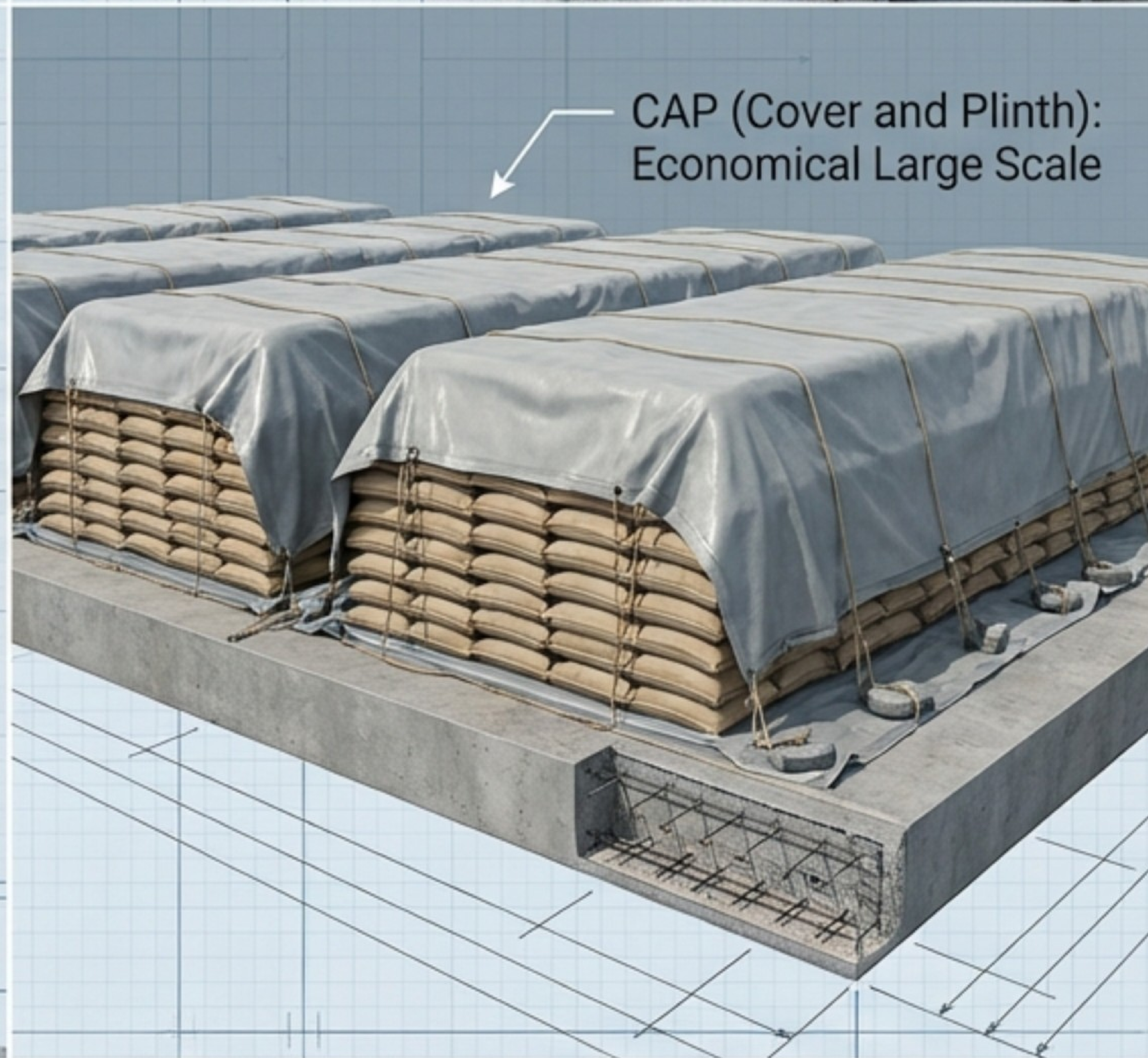


INDUSTRIAL SCALE SOLUTIONS







SILOS: Massive Bulk Storage



CAP (Cover and Plinth):
Economical Large Scale



COMPARATIVE MATRIX

TRADITIONAL (Low Cost / High Risk)	IMPROVED (Scientific / Protected)
 Mud-bin (Straw/Dung)	 Pusa Bin (Brick/Plastic)
 Thekka (Cotton Cloth)	 Chittore Stone Bin
 Bamboo Reed	 Modern Steel Silos

THE FUTURE OF FODDER SECURITY

- - Defeat Moisture, Insects, and Rodents.
- - Upgrade from Traditional to Improved Structures.
- - **Result:** Minimized Loss, Maximized Livestock Health.