

# HANDLING & STORAGE OF FOOD AID COMMODITIES

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# Key steps of handling food aid

- Commodities must be **received in good condition**
- Intake must be **orderly and recorded**
- **Quality** maintenance must be assured
- **Security** against theft and loss must be checked
- **Any loss** incurred must be identifiable and accountable
- **The end-use** requirements must be met.



# Receiving Commodities



# Receiving Commodities

- **An assessment** must be made of the usable capacity within the store.
- A **storage plan should be prepared** that will take into account the expected pattern of demand the store will have to meet.
- **Space should be allocated** according to the volume of stock expected, allowing easiest access to the most frequently moving stocks.
- The recommended **distance between stacks is a minimum of 2 m** to allow two workers carrying bags to pass.
- **Incoming stocks** must be carefully inspected.
- **Damaged items** are best stored separately and re-packaged where necessary.

# Stacks

A pile of things arranged one on top of another.



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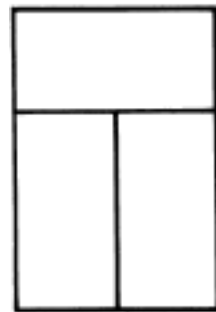
# Storage of Commodities

**STACKING:** Within a store, stacks should be built clear of all walls, buttresses and roof supports in order to allow access all round **for inspection, pest control and physical audit, and to permit free circulation of air.**

- The recommended space between the **stacks and walls or roof supports is 1 m.**
- **The tops of stacks** should be clear of the roof or roof supports so that it is possible for **a person to pass** easily around all sides and over the top of each stack .
- This space is **essential for inspection and for fumigation** or other pest control work.
- **Badly built stacks** may collapse and injure people, or cause damage to the commodity and/or the fabric of the store.
- **Pallets** should use for staking.

# Stacking Pattern

- Many stacking patterns can be used for any size of stack.
- Staking patter for low unit bag

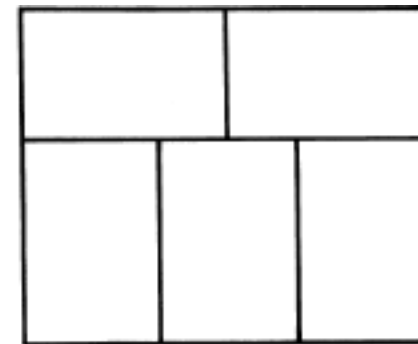


3 bag unit



5 bag unit

Bags with length/width ratio 2:1



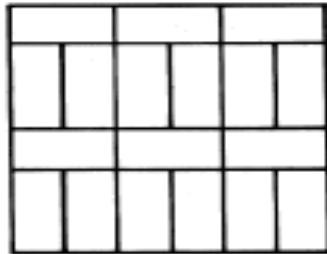
5 bag unit

Bags with length/width ratio 3:2

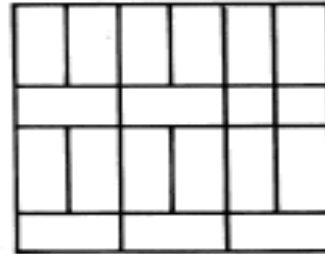
# Stacking Pattern

- Stacking pattern

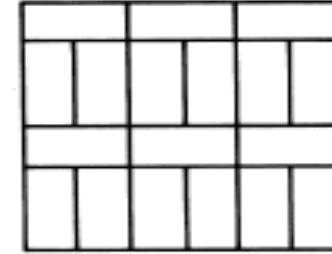
3 bag unit



Layer 1

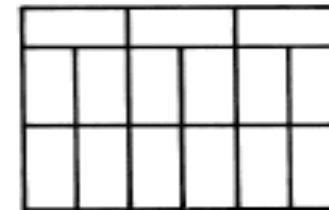
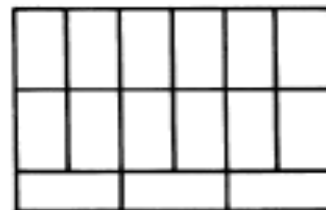
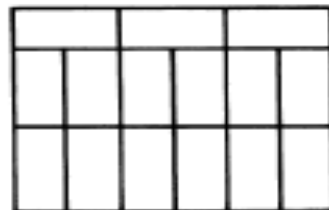


Layer 2



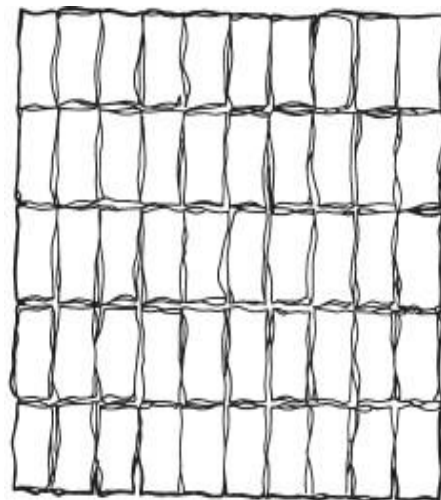
Layer 3

5 bag unit

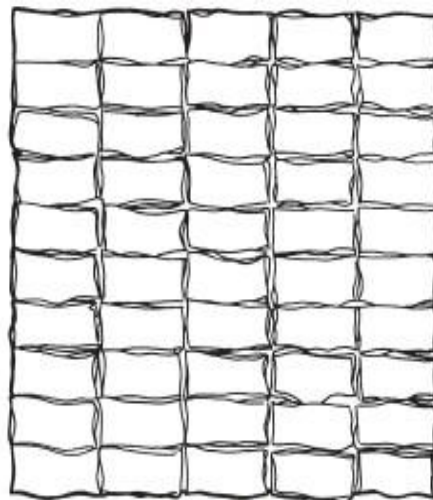




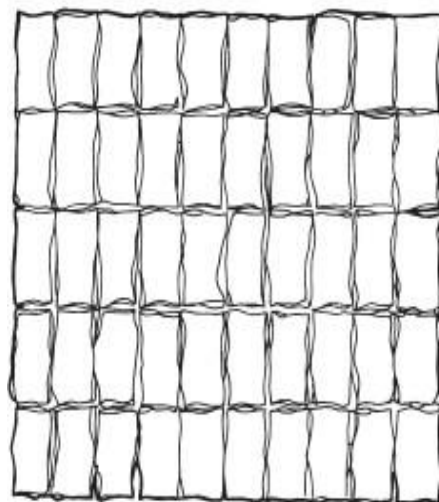
# Stacking Pattern



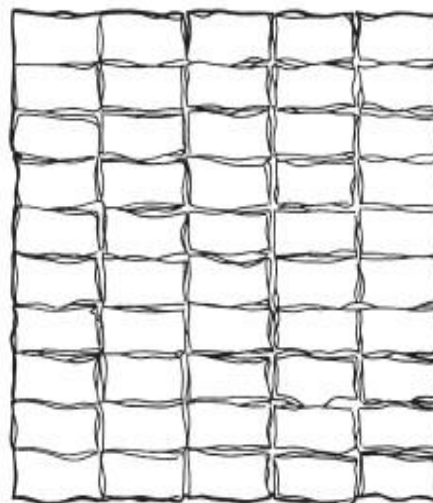
First layer



Second layer

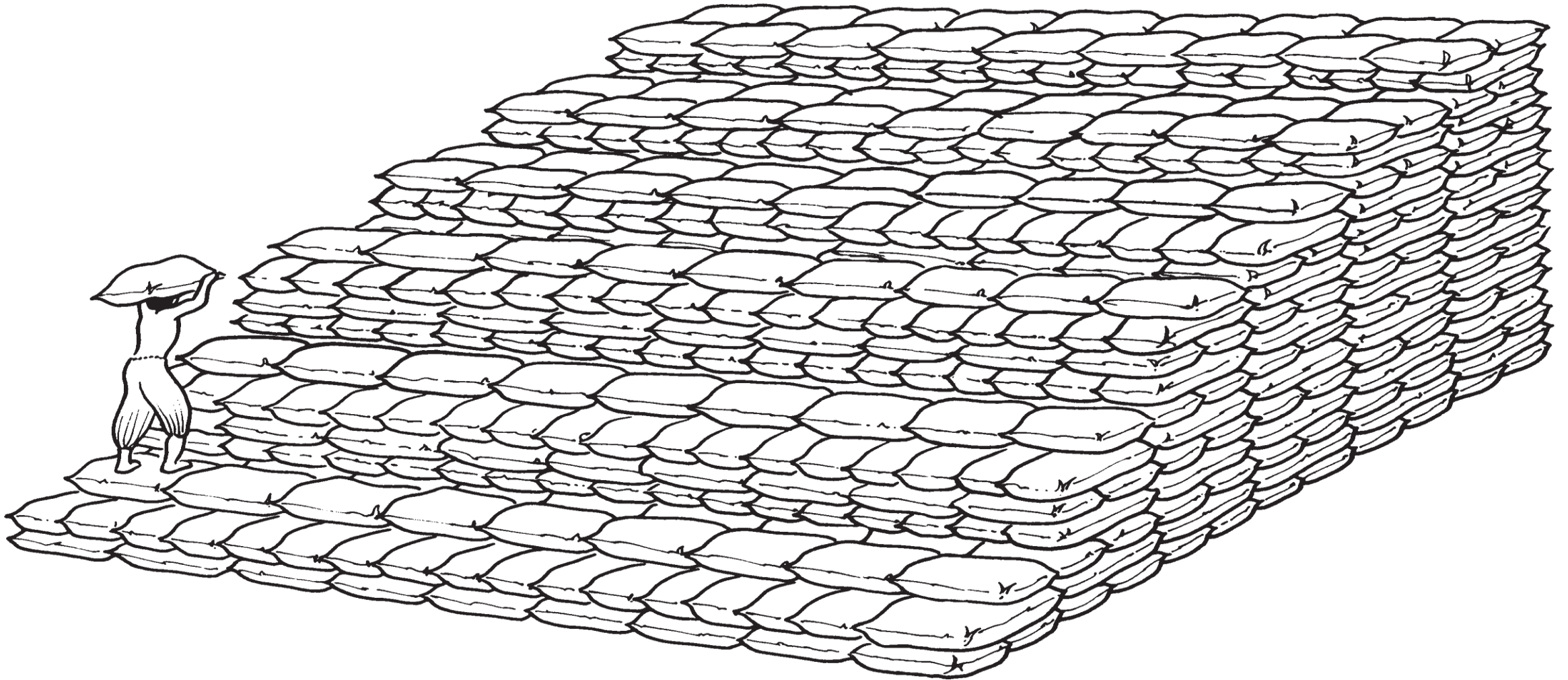


Third layer



Fourth layer

# Stacking Pattern



# Accounting for Commodities

- It is essential that **daily tallies of intake and dispatch** are reconciled in the warehouse ledger or stock book.
- **At intervals**, the total **stock should be verified by a physical audit** undertaken by an independent official.
- **Pulses, cereals and their products** should have their weight related to the recorded moisture content on **both receipt and dispatch** so that any shrinkage resulting from the commodity drying over a long period of storage in a dry climate can be determined and accounted for.
- In a **well** managed warehouse system, **weight losses due to insect** and rodent pests should be **minimal**.

# Inspection of The Store And Its Contents

- **Inspection provide** information concerning **quality assurance** procedure and future **shelf life**.
- Inspection must be **done regularly**, not less than **once per week**.
- It should include a **complete walk around the store**, inside and outside, and all stocks.
- **Looking carefully** for signs of theft, pest infestation, dampness, mould damage, spillage or leakage of stored commodities.
- **Roof leaks** and any other structural faults or security problems.
- **Appropriate action** should be taken as soon as possible to repair any damage or correct any faults.

# Stock Records and Stock Control

- **Records of receipts and dispatches**, together with a **daily record of stock balance**, are the minimum documentation requirements for the normal management of a warehouse.
- This information will commonly be **compiled in a stock ledger** for the warehouse or depot.
- Information concerning **each individual stack** must be recorded on a **stack card** positioned prominently, ideally at eye level, on each stack.
- **Stack cards** also provide the opportunity to record any information relevant to the particular stack, for **example, dates and details of pest control, any problems with packaging, roof leaks, etc.**

# Stock Records and Stock Control

- **A good documentation** system will provide a brief, reliable account of all that takes place in the store insofar as it may affect the age, quality and quantity of the goods stored.

Stack No.: _____				
Commodity: _____				
Date	In	Out	Balance	Signature
<i>On reverse side</i>				
Date	Treatment given			By whom

To: \_\_\_\_\_ Project number: \_\_\_\_\_

I have inspected the store at (address) \_\_\_\_\_

on (date) \_\_\_\_\_ at (time) \_\_\_\_\_

Signed: \_\_\_\_\_ (Storekeeper)

Name of storekeeper (Block capitals): \_\_\_\_\_

#### STORE BUILDING INSPECTION REPORT

Weather at time of inspection: rainy/dry\*; sunny/cloudy\*; windy/calm\*

Degree of loading: full/75%/50%/25%/empty\*

Total volume/capacity of the store: \_\_\_\_\_ cubic metres

\_\_\_\_\_ tonnes

Condition of building: \_\_\_\_\_

(good/fairly good/poor)\*

G F P

Roof	G/F/P*	_____
Walls	G/F/P*	_____
Floor	G/F/P*	_____
Doors	G/F/P*	_____
Windows	G/F/P*	_____
Ventilators	G/F/P*	_____
Lights	G/F/P*	_____

\*Cross out words or letters which do not apply

Are there live insects on the walls and floors? \_\_\_\_\_

Is there evidence of rats or mice inside or outside the building, e.g. signs of gnawing, rat or mouse droppings, rat or mouse holes? \_\_\_\_\_

Are there any other matters which need attention, e.g. security of store, access, condition of site, storage machinery, etc.? \_\_\_\_\_

#### COMMODITY INSPECTION REPORT

Commodity in store	Quantity in store at the time of inspection	Length of time in store	Is it in good condition?

If a commodity is not in good condition give the reasons why, e.g. the rice is being eaten by insects, the cans of oil are leaking, etc.

Record of pest control treatments:



# Store Hygiene

- The store must be **kept clean by regular sweeping** of the floors which should be undertaken at least once every day.
- If the floor is swept clean at the end of the working day and **spillage is observed at the start of the next day**, it will be clear to managers that there has been unauthorized activity in the warehouse or that there was heavy rodent infestation **during the night or weekend**.
- **Every month** it will be useful to **sweep the walls** and also any ledges that permit the accumulation of spillage or dirt.
- A simple **broom** is the most useful piece of pest control equipment in a warehouse that is mainly used for food grains and processed foods.

# Broom



# Store Hygiene

- The prompt **removal of spillage** prevents insect populations developing in **cracks and crevices** from where they can infest the stored food aid commodities.
- A procedure must be introduced whereby stocks that are declared **unfit for human consumption can be removed from the store** and from the stock records, and disposed of or **salvaged without delay**.
- **Untreated insect infestations or mouldy commodities** must not remain in the store where they can put other stocks at risk.
- **Attention should also be paid** to the condition of the **exterior walls** of the store and the **surrounding areas**. The site must be kept clean.
- **Condemned stocks** must not be placed outside the store as they will attract vertebrate and insect pests.

# Dispatch of Commodities

- **First in, first out' (FIFO)** is a good general default rule for all food commodities because it helps to reduce the **overall age of stock in the warehouse**.
- **However, there are occasions** when it is necessary to dispatch stock that is not the oldest, for example, if younger stock has been damaged or is considered to be at risk of deterioration, or a specific part of the stock has been requested by the user.
- All issues must be **fit-for-purpose and packed in sound containers**, suitable to withstand the journey to the beneficiary.

# Labor Management and Security

- It is the **storekeeper's responsibility** to ensure laborers working in the warehouse are adequately informed, trained and supervised, particularly with regard to taking care in handling commodities and their own safety.
- They should also be made **aware of any pest control treatments** that are in use and the associated potential hazards.

# Support to The Storekeeper

Means by which the storekeeper can be supported are summarized below:

- ensure the **storekeeper is aware of his or her responsibilities**
- ensure the **appropriate local or counterpart organization** is also aware of these responsibilities
- if possible, **assist the appropriate organization** to provide adequate staff for storekeeping
- **support the storekeeper's** valid requests for necessary alterations and repairs to the store and for all necessary equipment
- **facilitate suitable training programs**
- **assist in locating and procuring** all necessary assistance for pest control operations
- advise and, if possible, **assist the storekeeper** in the identification of causes of loss or **damage** and in the keeping of meaningful records
- assist the storekeeper to identify **the reasons why** any stock needs to be downgraded.

# Reports



# Reports

- **Detailed reports** may or may not be called for by the **local organization**, but the storekeeper **should kept**.
- The **problem and any recommended action** to be taken must be clearly stated.
- The **responsible person should**, if possible, ensure all reports are made available to him or her, as well as to the responsible local organization.
- The provision of **triplicate report** forms may assist this, especially at **central depots**.
- For **outlying stores**, other arrangements may be needed.