

# *Some records and achieved results:*

## A - New halfa (Winter 2011-2012):

| Production | Neighboring farmers | Harvested yield by New technologies | Yield increasing % |
|------------|---------------------|-------------------------------------|--------------------|
| Crop       | t/ha                | t/ha                                | -                  |
| Wheat      | 1.48                | 4.5                                 | 304                |
| Sunflower  | 0.88                | 1.8                                 | 204                |

## B – New halfa (Summer 2012):

| Production | Neighboring farmers | Harvested yield by New technologies | Yield increasing % |
|------------|---------------------|-------------------------------------|--------------------|
| Crop       | t/ha                | t/ha                                | -                  |
| Cotton     | 1.3                 | 4.7                                 | 361                |
| Sunflower  | 0.7                 | 2.7                                 | 385                |

### C - Jazira (Winter 2012-2013):

| Production | Neighboring farmers | <i>Harvested yield by New technologies</i> | Yield increasing % |
|------------|---------------------|--|--------------------|
| Crop       | t/ha                | t/ha                                       | -                  |
| Wheat      | 1.6                 | 6  | 375                |
| Sunflower  | 0.9                 | 3.2  | 355                |

### D – Rahad (Summer 2013 - 2014):

| Production | Neighboring farmers | <i>Harvested yield by New technologies</i> | Yield increasing % |
|------------|---------------------|--|--------------------|
| Crop       | t/ha                | t/ha                                       | -                  |
| Cotton     | 1.7                 | 8.6  | 500                |

# **Our dream**

**to increase productivity in an easy and inexpensive manner in farmers' farms.**

**THE BEST FORMULA IS SPREADING OF NEW TECHNOLOGIES:**

**NEW MACHINES,**

**NEW SEEDS,**

**NEW FERTILIZERS,**

**NEW MANAGERIAL METHODS**

**AND APPLYING THEM IN THE FARMERS' FIELDS**

**LACK OF  
EFFICIENT  
MACHINES OR  
MISMANAGEMENT  
FOR  
ACCEPTABLE  
SOIL  
PREPARATION**









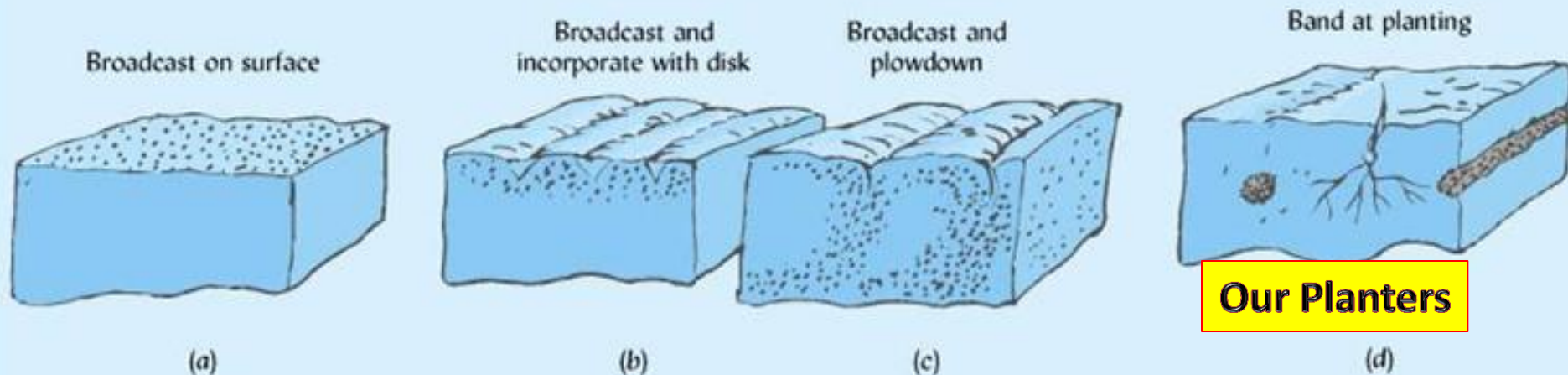
# Methods of application of **STARTER** fertilizers to the soil:

## 1. Broadcasting: (a), (b) & (c)

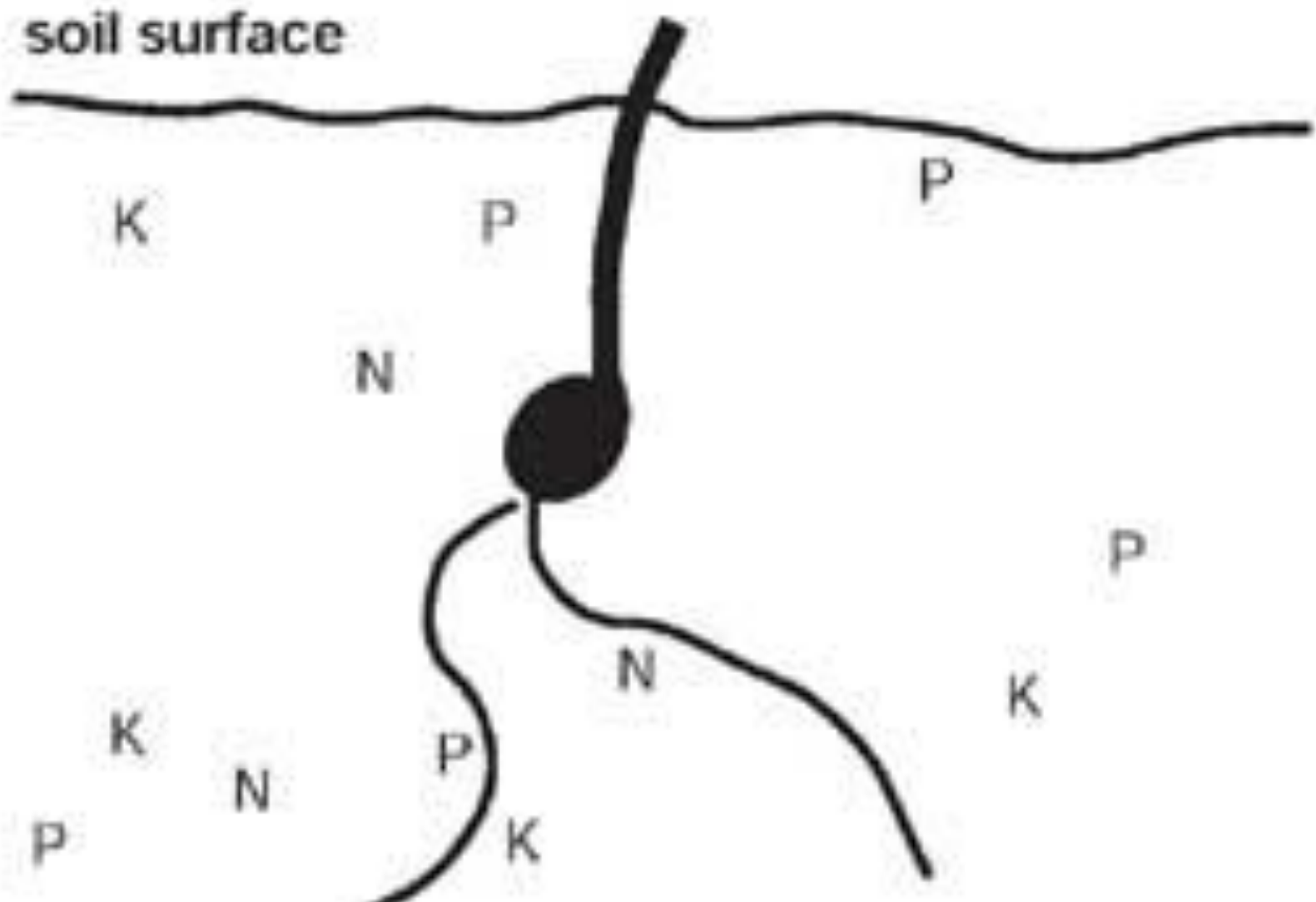
**By Farmers**, distribution over the whole field.

## 2. Placement: (d)

**By our planters**, Application in bands near the plant roots.

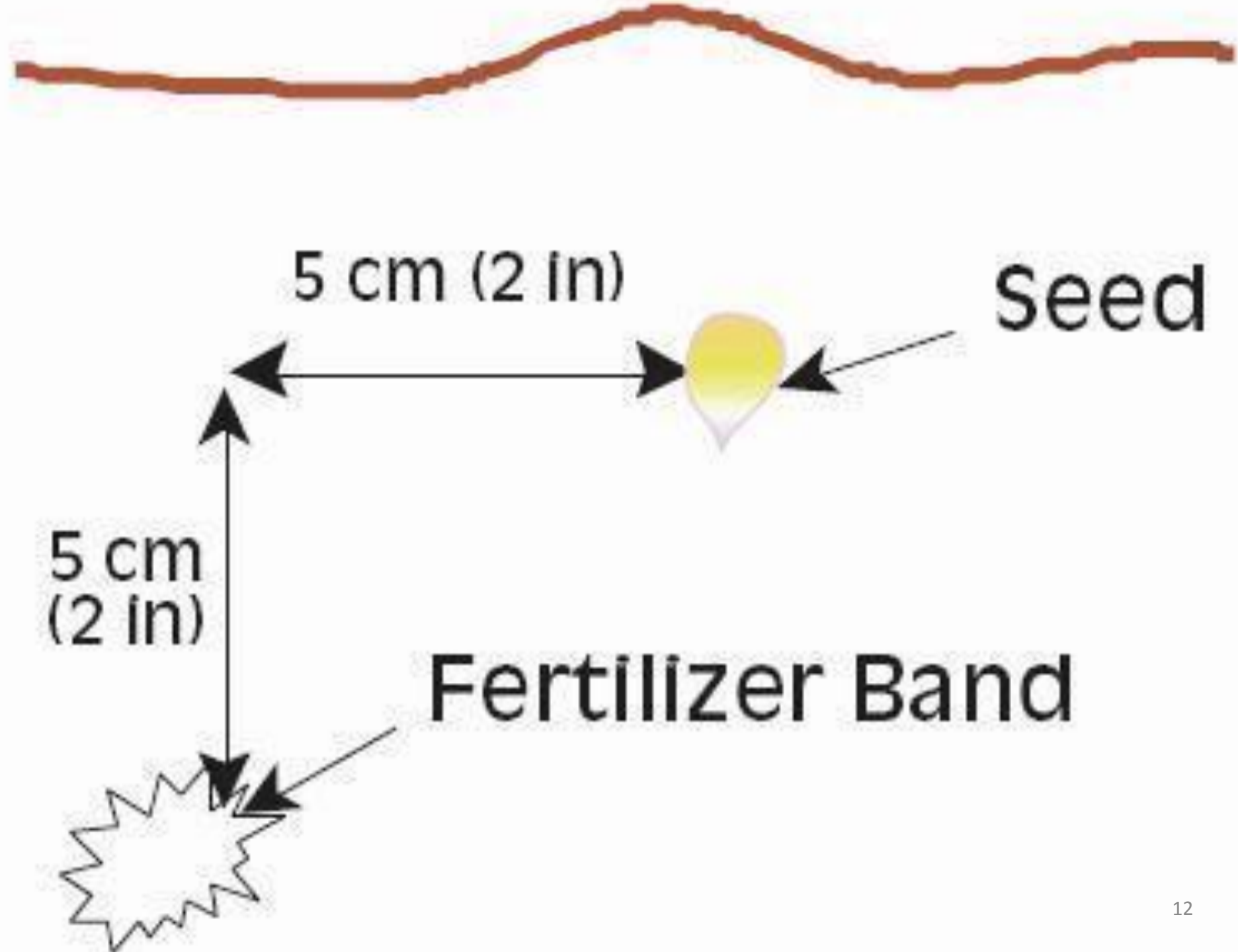


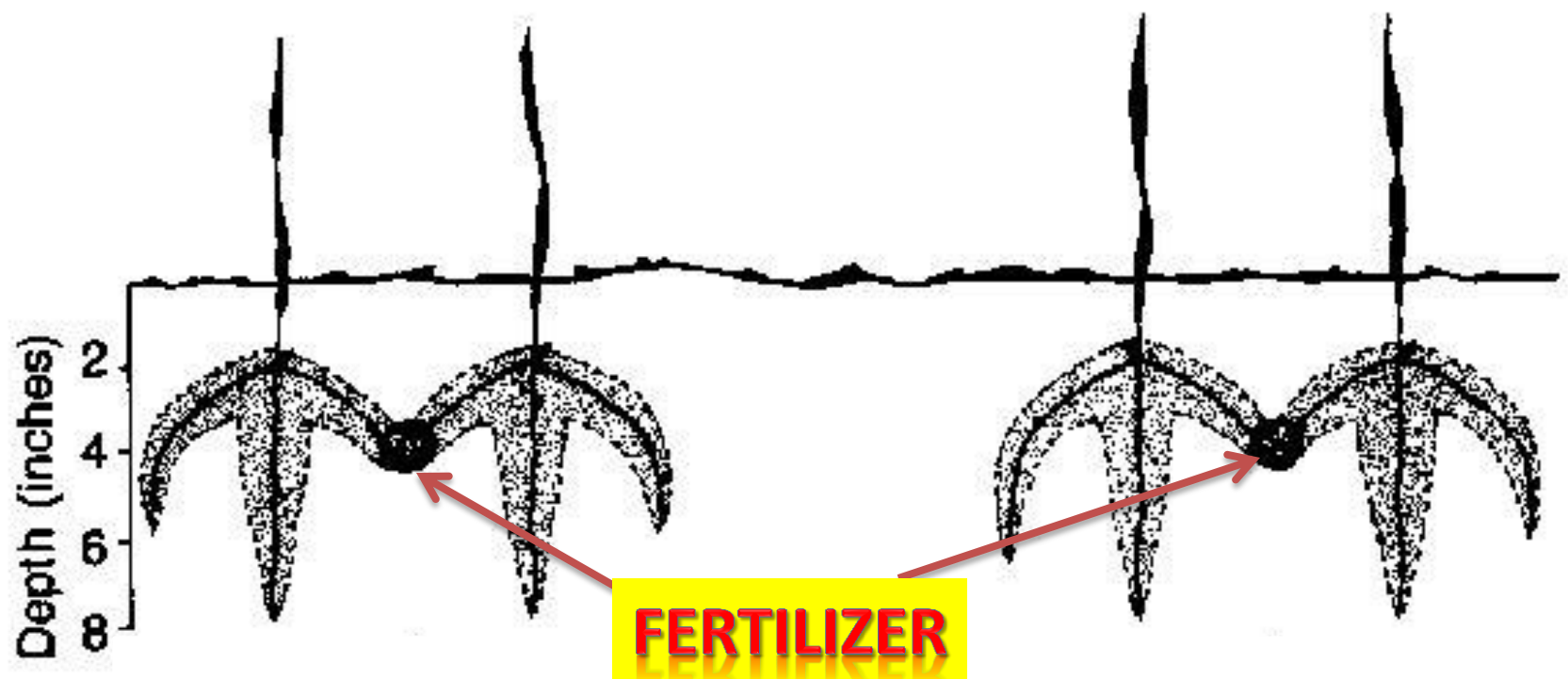
**BECAUSE** A seedling root system cannot acquire needed nutrients from the bulk soil.



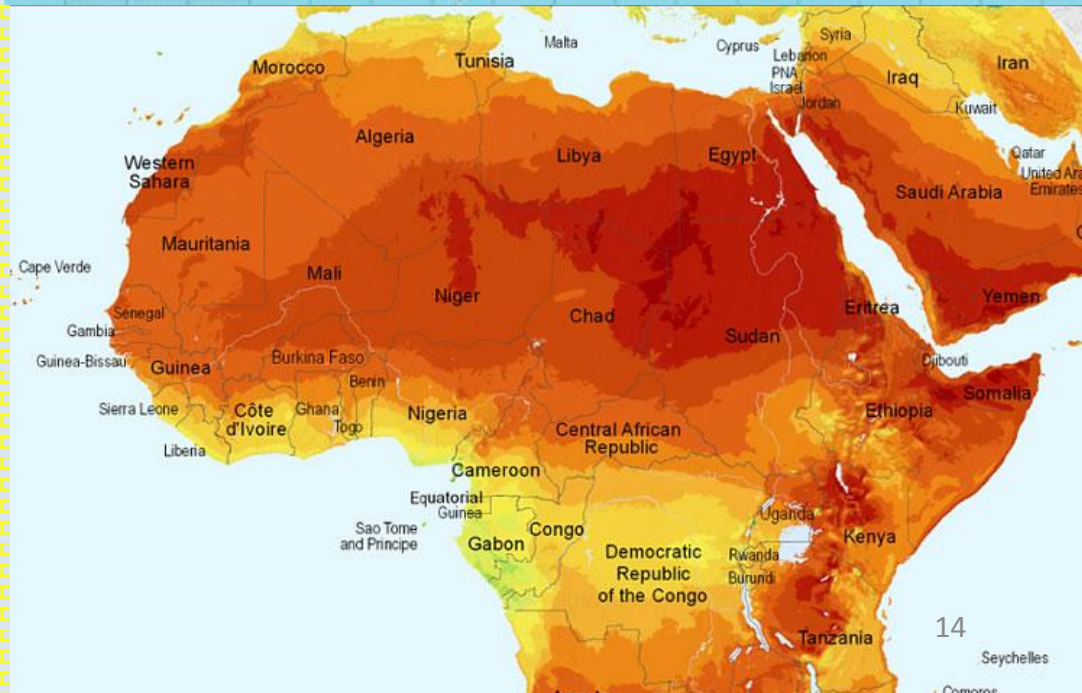
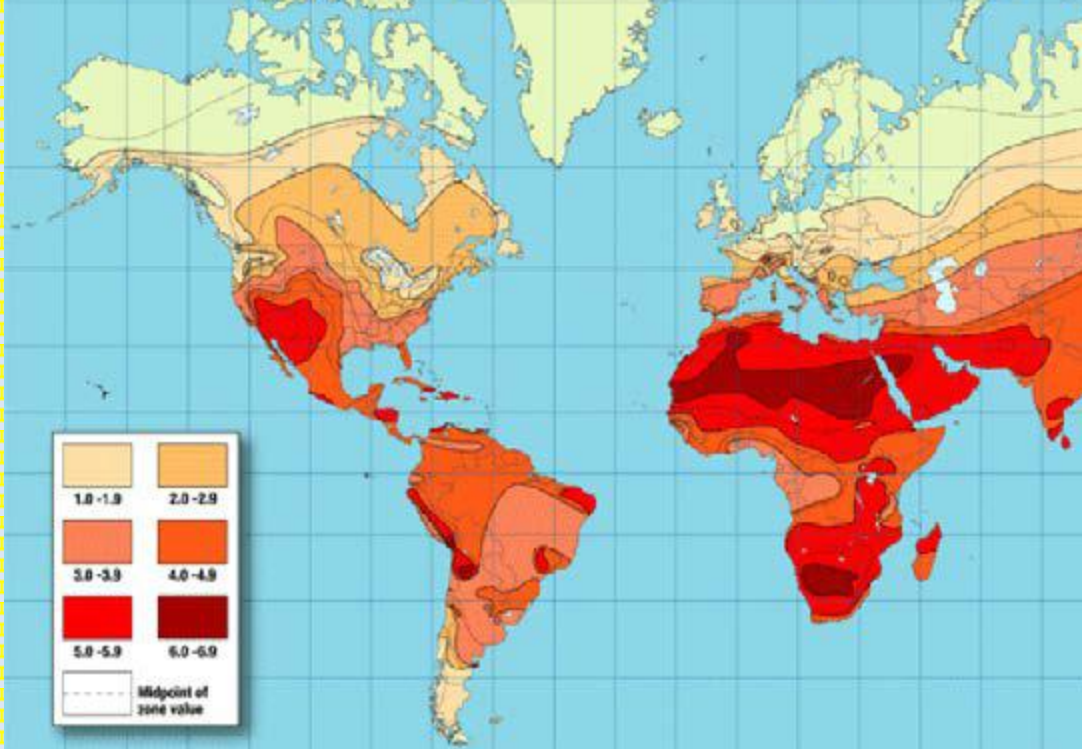


**Planter with fertilizer placement system**





Sudan is receiving  
high amount of **Solar**  
**energy**, So we can use  
this natural gift by  
more plant  
population **or** better  
plant distribution **by**  
**TWIN Row**  
**Planting.**



# Twin Row Planter



2011 12 12

# Twin Row Zigzagged Planting

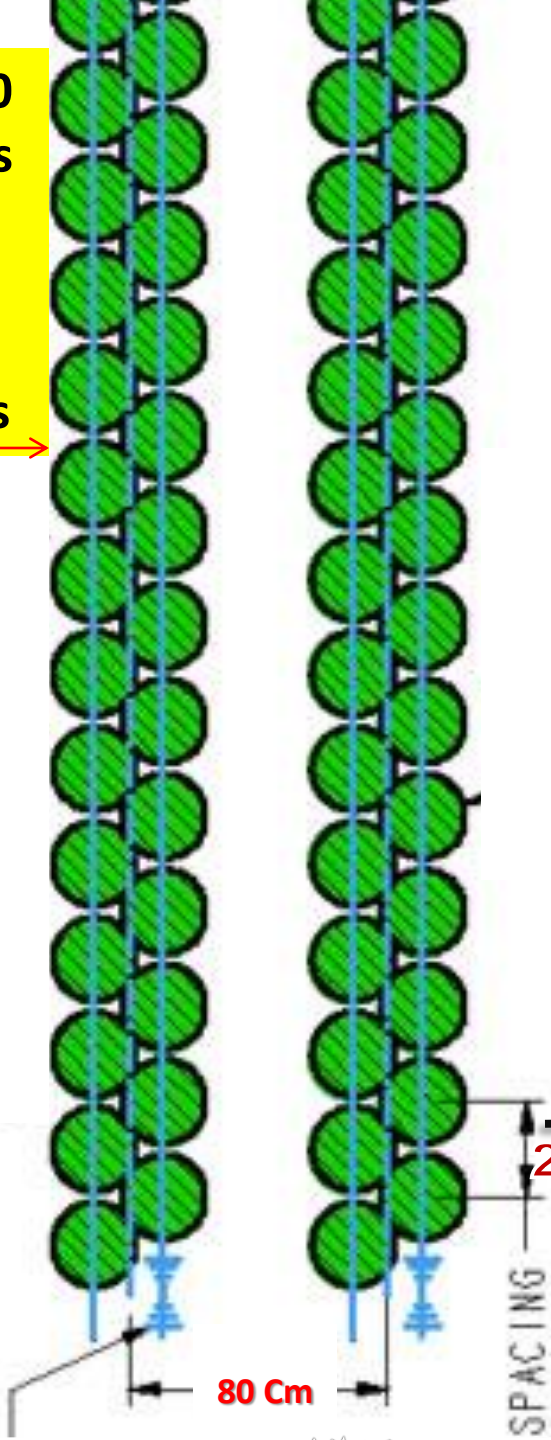



**Fertilizer placement below the Seeds**



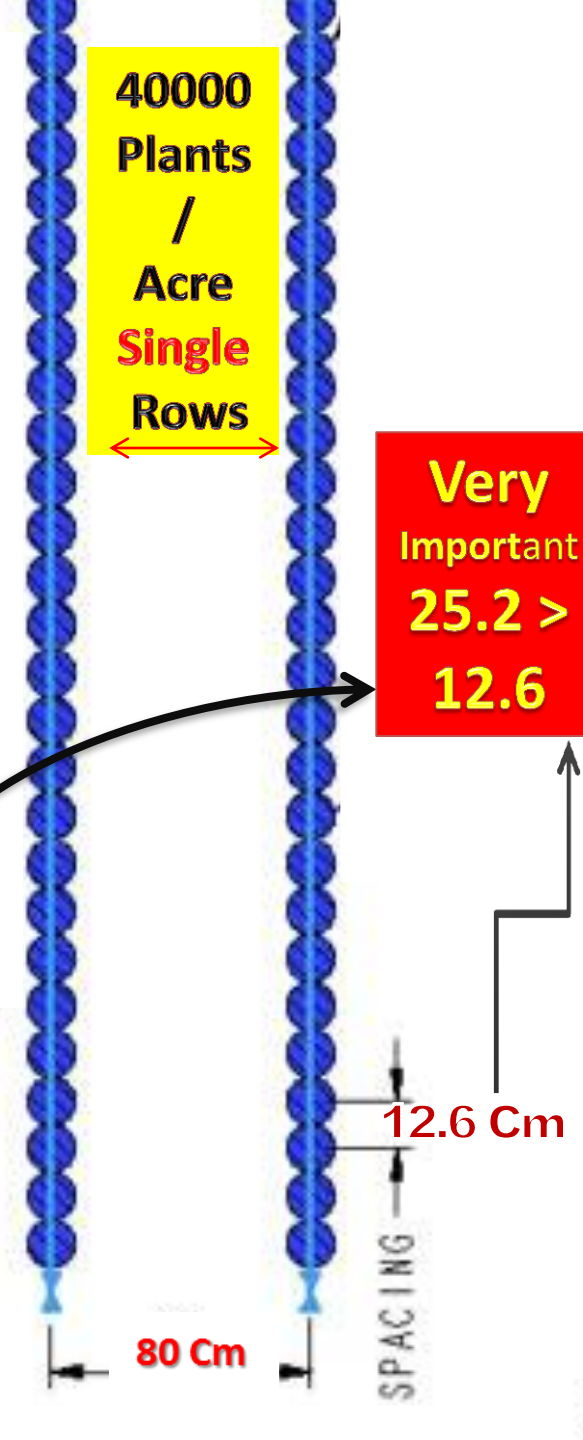
**ZIGZAGGED  
PLANTING**

40000  
Plants  
/ Acre  
**Twin**  
Rows



  
**In single  
Row,  
Once the  
plants  
get too  
close  
together,  
they  
become  
naturally  
stressed  
and fight  
each  
other for  
moisture  
and  
nutrients.**

40000  
Plants  
/ Acre  
**Single**  
Rows



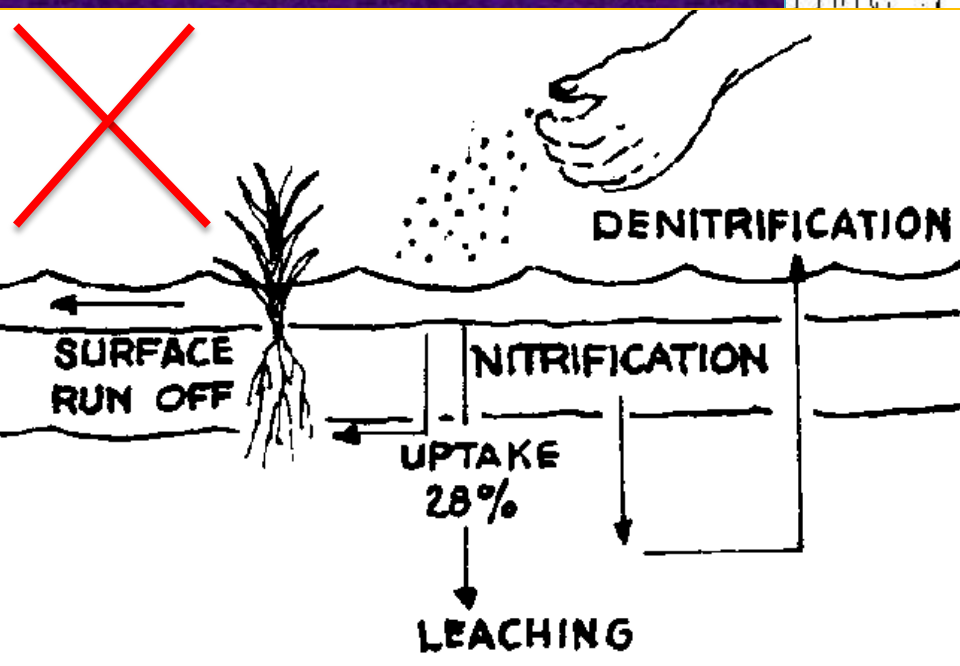
**Very  
Important  
25.2 >  
12.6**



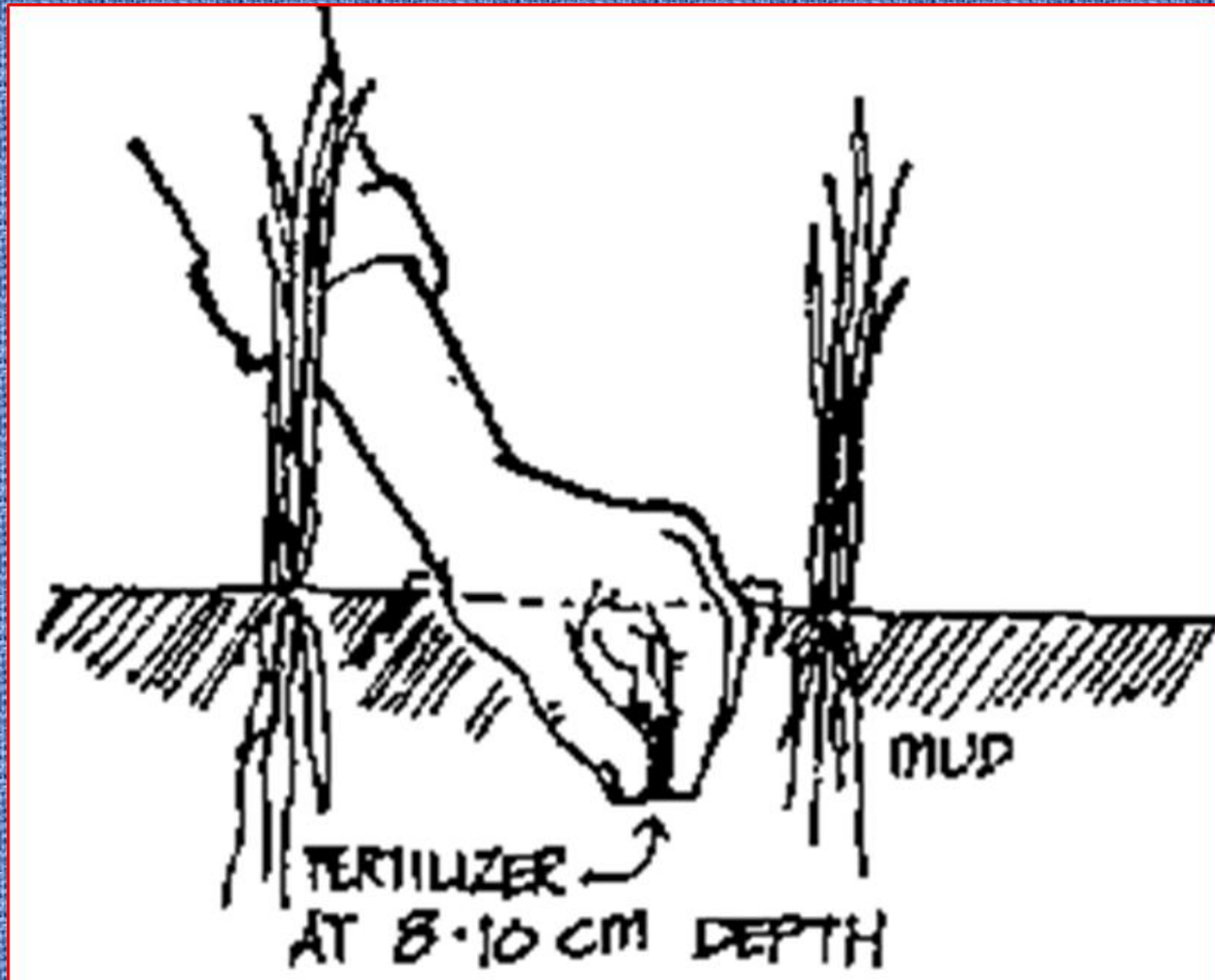
**SINGLE  
ROW  
PLANTS**

**TWIN  
ROW  
PLANTS**

# WRONG NITROGEN FERTILIZER DISTRIBUTION



# Right Nitrogen fertilizer placement





# Inter Row Cultivator with Fertilizer Distributer



A red fertilizer distributor machine, branded 'TARASHKADEH', is shown in operation in a cornfield. The machine is moving through rows of young corn plants, distributing fertilizer into the soil between the rows. Several men are standing around the machine, observing the process. One man in a blue shirt and jeans is standing directly behind the machine, while others in white traditional clothing are positioned to the left and right. The foreground shows rows of green corn plants growing in dark brown soil.

Distributes & mix fertilizer with  
the soil between rows →

# ***...Mechanical Weeding***



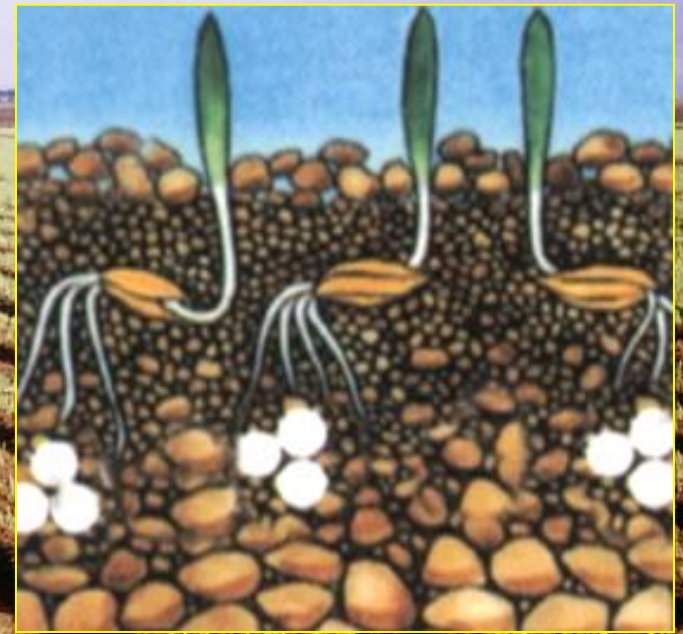
# SCATTERED SEED PLANTING







**Seed Driller with Fertilizer  
Placement & Furrower**  
***ROW PLANTING for Sesame,  
Alfalfa, Wheat....***





Wheat farm produced 6 ton/hectare in Jazeera

**THE IDEA OF HIGH YIELDED SORGHUM FARMS  
ARE SPREADING NOW**



A photograph of three men standing in a vast field of green, leafy plants, likely a crop field. The man on the left is wearing a white t-shirt. The man in the center is wearing a striped shirt and is gesturing with his hands. The man on the right is wearing a red and blue soccer jersey. A yellow thought bubble with a blue outline is positioned above the man in the center, containing the text "How many tons?".

**How many tons?**

**Cotton production;  
More than 10 t/ha**



**Our staff**



**Many farmers are  
producing more than  
7 ton/hectare**

# Nap Sacks Sprayer in Wheat farm



2 hectare/hour Spraying without any cost



# Valved Pipes



# Reducing the Costs of Irrigation and increasing water efficiency



# Mower Binder

**HARVESTER FOR SESAME, WHEAT**

