

**On – Farm Seed System  
Private Seed Production program  
through The New Seed Cleaners**

# History of land use in IRAQ (<1990)

- Wheat, barley and other cereal crops were mostly local cultivars
- New cultivars came from research (Abo ghraib-3 and some as drought tolerant)
- The major crop rotations in northern Iraq:
  - Wheat -fallow-wheat
  - Wheat-legume
  - Barley-fallow
- The major crop rotation in middle and southern Iraq:
  - summer-winter crop rotation seasonally
- Crop rotation in northern Iraq helped not to use pesticides and fertilizers before 1990 because there was no need for these chemicals
- Moderate and low use of chemicals were used in middle and southern Iraq as a benefit of existing crop rotation, too.

# Land use during 1990 - 2000

- **Farmers were forced to grow continuous cereals, particularly wheat.**
- **The government bought all harvested grains with low price and did not leave any seed to be planted by farmers**
- **The government supplied all the seeds to farmers through seed companies with low subsidised price as well.**
- **Thus, >200,000 tonnes of wheat and barley seeds were needed for this project .**



# What happened after that?

- About **10% of certified seeds** and about **20% of trade seeds** could be **supplied** to farmers under control of seed testing and certifying office.
- The **70% of seeds** then came **from silos** (by Ministry of Trade) **infected by diseases** and **weed seeds** with high percentage **mixed seeds** (the best purity for silo seeds were  $< 60\%$  and the best cleanliness  $< 80\%$ ).



## مصادر البذور المعتمدة



# What happened after that?

- The seeds were unavailable, so particularly silo seeds were transferred from north to south and some times from south to north
- The ability of seed companies were very low to clean seeds, so all trade class received from seeds comp. and trade seeds of silos are replanted without cleaning
- Because of these, a huge distribution of weeds, diseases and insects happened in all locations of Iraq, and this was multiplied with the continuous cereal growing
- Since then the farmers started to use chemicals (herbicides, pesticides, fungicides and fertilizers)
- The government started again with new plant protection program with high subsidied prices for these chemicals but it failed to solve this problem

# What we can do now?

- **Need to go back to nature, so we need to rebuild the soils to create healthy conditions**
- **Supply farmers about 50% of their seed and fertilizer requirement without any payment at least for 5 years, or support private sector for seed production**
- **The new seed cleaners could be used for clean seed production in Ninevah as commercial class for 90% of seed needs in Iraq**
- **As On-farm seed system, field inspection will be made in selected best farms in purity and cleanliness as commercial class**
- **Cleaning all the seeds of selected farms with low price (only the cost of renting seed cleaners)**
- **Giving the farmers identity cards on each seed bag (purity%, cleanliness%, and germination%, and other details)**
- **Help the farmer to sell his seeds to other farmers through extension program**

## Cultivars resources مصادر البذور المعتمدة

### Seed Testing And Certification

#### دائرة فحص وتصديق البذور

1. التفتيش الحقلية Field Inspection
2. الفحص المختبري Lab Testing

### Seed Companies Contracting with farmers

تستلم شركات البذور الحكومية هذه البذور وتتعاقد مع المزارعين على إكثارها وبتدرج الرتب ا تي:

حقول مزارعين مصدر ذاتي للبذور  
Farmer field ( Private Seeds source )

مقبولة كبذور تجارية  
Accept as Trade Seeds

أسعار الشركة بذور ا ساس  
Comp. Price for Foundation seeds  
سعر الشراء %150 Buying comparing with trading  
سعر البيع %160 Selling comparing with trading

تزرع موسم واحد في حقول المزارعين المتعاقدين  
Planting 1 season

Refuse في حال الرفض الحقلية أو المختبري  
Accept في حال تصديقها تعاد لشركات البذور برتبة أدنى هي ...

بذور مسجلة  
Registered seeds  
سعر الشراء %140 (price) Buying comparing with trading  
سعر البيع %150 (price) Selling comparing with trading

تزرع موسم واحد في حقول المزارعين المتعاقدين  
Planting 1season

Refuse في حال الرفض الحقلية أو المختبري  
Accept في حال تصديقها تعاد لشركات البذور برتبة أدنى هي ...

بذور مصدقة  
certified seeds  
سعر الشراء %130 (price) Buying comparing with trading  
سعر البيع %140 (price) Selling comparing with trading

تزرع أربعة مواسم في حقول المزارعين المتعاقدين  
Planting 4season

Refuse في حال الرفض الحقلية أو المختبري أو انتهاء الموسم الرابع  
Accept في حال تصديقها لكل موسم تعاد لشركات البذور بنفس الرتبة

بذور تجارية صالحة للزراعة  
Accept as Trade Seeds

تداول ذاتي بين المزارعين  
Private

# What we can do now?

- 60,000 tons of wheat seed needed for Ninevah every year but the seed cleaners can work 8 hours/day to produce about 12 tons, so each seed cleaner can produced 2000 tons per 6 months
- The 10 seed cleaners can produced 20,000 tons of wheat seed, so 3 years needed to change the situation of seed industry in Ninevah





Seed Cleaners (1 minute movie)