Together for a BETTER AGRICULTURE
Agricultural Technologies to support grape production in Northeast Baalbek
Since the inception of **Debbane Agri Holding sal** in **1952** as a member of **Debbane Saikali Group**, it has been regarded as one of the Leading Agricultural groups in Lebanon and the MENA region.

With more than 150 agronomists across the operations, Debbane Agriculture Holding sal is renowned for its contribution to the agricultural sector, continuously **pioneering new techniques** and **specialty products**.

The close relationships we build with growers allow us to craft solutions to their specific needs, and provide the right products for each market.

We enrich the market with **quality innovations** from multinational companies by conducting **extensive local trials** and **large-scale demonstrations**, adapting them to local market conditions.
1952 DEBBANE FRERES - LEBANON
1976 DEBBANE & CO - SYRIA
1999 DEBBANE FOR MODERN AGRICULTURE - IRAQ
2005 DEBBANE POUR L'AGRICULTURE - ALGERIA
2009 APOLLO SEEDS - USA
2009 GLOBAL CARE OPERATION (PEST CONTROL) - IRAQ
2009 DELTA PARS NAHADE - IRAN
OUR PRESENCE

380+ EMPLOYEES
Out of which
150+ AGRONOMISTS
6+ COUNTRIES
GDP contribution: 3%

25% of total country area is green

12.6% of total country area is arable (132,000 ha out of 1,045,000 ha)
Demographics

- Youth: 11% of producers are below 34 years old
- 41% are above 55 years old
- 70% of holdings cultivate less than 1ha
- Only around 1.8% cultivate more than 10ha

Ref: ESCWA, 2019
60% of available water resources consumed by agriculture

25% use drip irrigation - 49% adopt surface irrigation

Deep wells are the main source of irrigation; illegal installations are exacerbating groundwater quality and quantity (UNDP, 2014)

Lack of knowledge in irrigation systems is causing low water use efficiency (approx. 60%)

Ref: ESCWA, 2019
- Budget Constraints
- ICT availability awareness
- Farmer acceptance
- Relevance of information
- Operational ICT constraints (connectivity, electricity, etc…)
- Saturation of local market, need for export

Ref: FAO, 2012
- Hydroponics
- Grapes projects (Case study)
- Weather stations
- New Technologies department (drones, automated systems, IoT, A.I, etc...)
Traditional grapes projects (planting dates, harvesting dates, overall status of produce and seasons in general)

What are our projects trying to solve? What is their added value?

Special Royalty varieties
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Grapes Project
Current situation

Productivity average:
20-30 T/ha
Min 7 T/ha
Max 55 T/ha

Selling prices:
From 0.5$/kg to 2$/kg
Average: 0.7$/kg

Low Profitability
**Targets**

**Harvest windows**
- Early---Earlier between May-June
- Mid---Higher Yield
- Late---Higher Yield and later Production between November & January

To meet international quality standards

To overcome climatic threats

**Means**

New developed cultural practices including training of vines, pruning, leafing, bunch thinning, berry thinning, bunch topping, cane topping, irrigation, fertigation, tilling, harvesting and maturity (Knowledge)

New varieties (seedless grapes-all colors and shapes)
Rootstocks
Plantation densities
Infrastructure
Plastic/net covering
Productivity average: Up to 40 T/ha

Selling prices: From 2 $/kg to 5 $/kg

High Profitability
ROI = 4.5 Years