

# Pilot demonstration project arable farming & outdoor horticulture

Seed Money Project Azerbaijan

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# Summary

- Initial situation
- 2019 seed money project
- Future

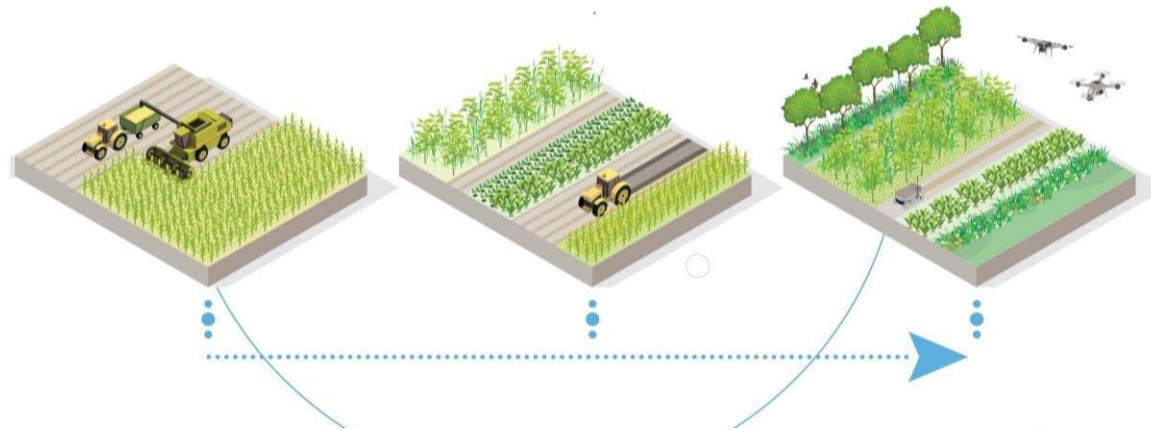
# What was done before?



- Study WUR (Siemen van Berkum et al.)
  - Set up pilot farms to improve agriculture (a pilot farm is not a research farm)
  - Proof of concept: local demonstration & innovative agricultural insights to farmers
  - SARA-webtool (Systemized Agribusiness Resources of Azerbaijan)
- Visits of delegations of Azerbaijani Ministry of Agriculture and Research Institute to the Netherlands
  - Inspiring example: Dutch model of pilot farm (Wageningen)

# Seed Money Project

- Aim: Support setting up a commercial pilot/demonstration farm where regular crop production is combined with demonstration and research. The research will be a part within the total (commercial) farm.



- Inspired by/based on Dutch concept

# Activities

- Desk research
- Bas Janssens (WEcR) & Thie-Arend Brouwer (PPO):
  - Location Pilot farm KUDAMIR
  - Agrifood Expo Baku / Dutch Embassy / potential Dutch partners
  - Ministry of agriculture, Research Institute
- Meetings with Martis van Splunter
- Global Business Model
- Presentation Martis van Splunter 'pilot farm'; during seminar 'Sustainable agriculture and Healthy food' organised by Azerbaijan Ministry of Agriculture and Dutch Embassy in Baku

# Activities II

- HAS visits and visiting students. Topics:
  - Suzie van Paasen: demo farm intensive sheep farming
  - Remie Sturme: fattening meat calves
  - Leonardo Liquidara: opportunities alternative vegetables and nut growing
  - Niels Vermue: optimization feed production
- Businesses:
  - Advices for irrigation systems
  - Seminar in Baku: how to set up a watering system?
  - Blue print for a glass house on pilot farm

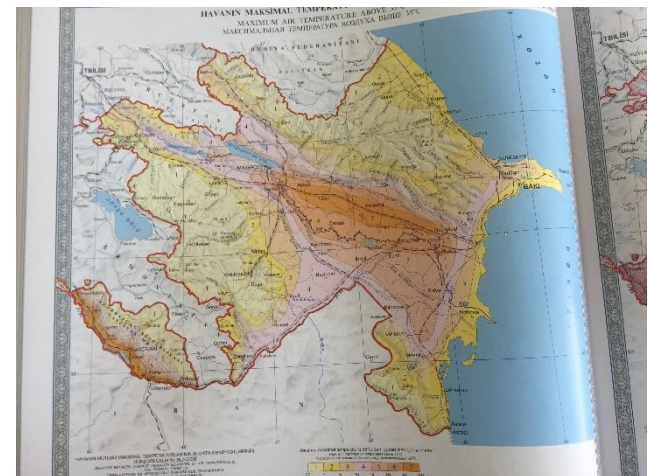
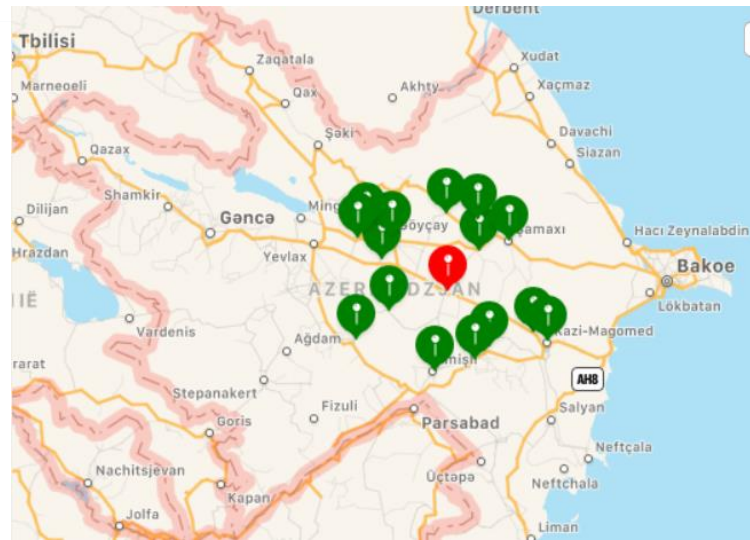
# Background

## ■ Climate:

- Dry subtropical
- Hot, rainless summers and cool, wetter winters
- Rainfall ranges from 430 mm-185

## ■ Region:

- Crops: grains, oilseed, leguminous, melons
- Livestock: sheep and goats, birds and cattle



# Kurdamir pilot farm

- Location: Kudamir ±150 km from Baku made available by Ministry of Agriculture Azerbaijan
- Former Kolchoz Sigirli Gross: area 306 ha of which 220 ha cultivated arable.
- Soil: good rooting, loose and dry (clods); sampling & analyses needed
- No machineries (basic equipment is missing), no labor, old buildings
- Target audience of the pilot farm: The pilot farm focuses primarily on support small farmers.
  - Important to know what is going on in small companies in practice





# Global model

- Commercial farm (grains, oilseed, leguminous, melons)
- Meeting place farmers and businesses: meetings, information service, education
- Training and demonstration centre:
  - Field trials (e.g. nitrogen application, crop protection, varieties, etc)
  - Demonstrations of machinery, storage
- Research:
  - Test plots (simple  $\leftrightarrow$  block test)
  - Data collection

# Focus pilot farm

- Start simple: low investments; big investments and 'bling bling' not always necessary
- 'Seeing is believing'
- Cheap machinery  $\leftrightarrow$  expensive machinery
- Involve local suppliers
- Create local network: small group of local farmers visiting the pilot farm every 2 weeks
- Not only Dutch technology and know how

# Deliverables

- Leaflet (English / Aziri)
- Report of trip: including recommendations
- Presentation Pilot Farm
- Global Business Model



## CANVAS BUSINESS MODEL: Kudarmir Pilot Farm; October 2019

<b>Key Partners</b> <ul style="list-style-type: none"> <li>• Municipality: legislation</li> <li>• Ministry of Agriculture in Azerbaijan</li> <li>• Research partners: ....</li> <li>• Suppliers: machineries, inputs (seeds, fertilizers, pesticides) , water irrigation etc.</li> <li>• Kudarmir pilot farm ambassadors</li> <li>• Dutch experts: WUR/HAS</li> <li>• Local: HH Group, Agrochemicals &amp; Enza Zaden</li> <li>• Rijk Zwaan</li> <li>• AgriSpace (Local Genec Tractors and tillage equipment)</li> </ul>	<b>Key activities</b> <ul style="list-style-type: none"> <li>• Arable farming: crop production</li> <li>• Service provider: demonstrations, training, research</li> </ul> <b>Key resources</b> <ul style="list-style-type: none"> <li>• Land</li> <li>• Finance of investments</li> <li>• Employees</li> <li>• Licenses and permits for (re)building and farm use</li> <li>• Inputs, water</li> </ul>	<b>Value proposition</b> <ul style="list-style-type: none"> <li>• Commercial production of arable and horticulture products</li> <li>• Demonstration &amp; training: show cases, demonstration fields, information, sharing knowledge and expertise; meetings/seminars, open days, machine demonstrations</li> <li>• Research: data collection, test fields, variety research, fertilization and crop protection tests</li> </ul>	<b>Customer relationships</b> <ul style="list-style-type: none"> <li>• Farm excursions</li> <li>• Advisory service, information to farmers</li> <li>• Courses</li> <li>• Demonstration days</li> </ul> <b>Channels</b> <ul style="list-style-type: none"> <li>• Leaflets</li> <li>• Network local farmers</li> <li>• Website</li> <li>• Press</li> <li>• Symposia</li> <li>• Ministry of Agriculture</li> </ul>	<b>Customer segments</b> <ul style="list-style-type: none"> <li>• Farmers</li> <li>• Governmental organisations</li> <li>• Others stakeholders involved in the arable supply and processing chain (e.g. advisors)</li> <li>• Branch organizations</li> <li>• (agricultural) schools and universities</li> </ul>
<b>Costs Structure</b> <ul style="list-style-type: none"> <li>• Investments: interest, depreciation, maintenance</li> <li>• Other costs: land lease, labour, inputs, fuel, water</li> <li>• Project costs</li> </ul>		<b>Revenues</b> <ul style="list-style-type: none"> <li>• Sales of arable and vegetable products</li> <li>• Project revenues (training, demonstrations, research, etc.)</li> <li>• Other revenues: subsidies, supporters</li> </ul>		

# Follow up, next steps

- Start up pilot farm; Dutch support needed (e.g. WUR expertise, catalyst);
- Set up (simple) demonstrations, training and education programs for farmers
- Development of agricultural training courses for local farmers and advisors
- Dutch companies are interested to step in:
  - Demonstration machinery
  - Seeds
- Support program:
  - Trips of Dutch experts
  - Visits of Azerbaijani to the NL



# Thanks!

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