Advanced Fertigation Solutions for Climate Resilient Rural Areas

*Topsector-**Seed Money Project***

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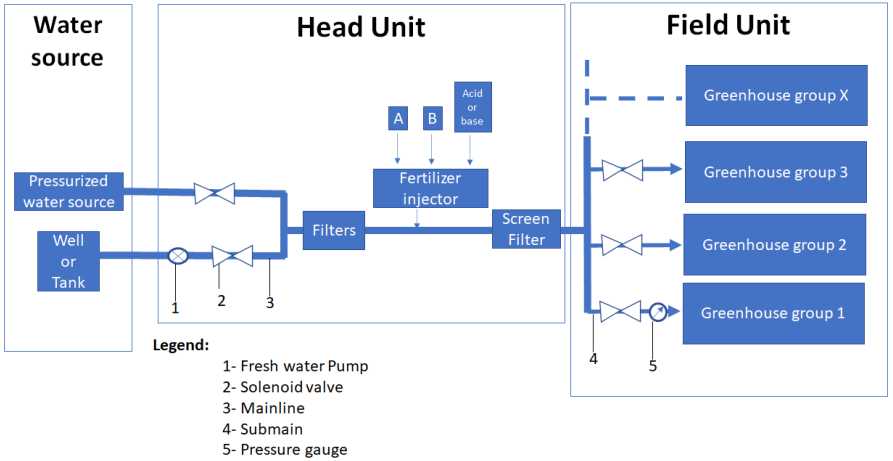
Fertigation in agricultural

- System to provide water and nutrients to the plant
- Irrigation should be based on time and radiation and (status of) the crop



Irrigation and supply of nutrients

Open field as well

Simple systems

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Simple systems

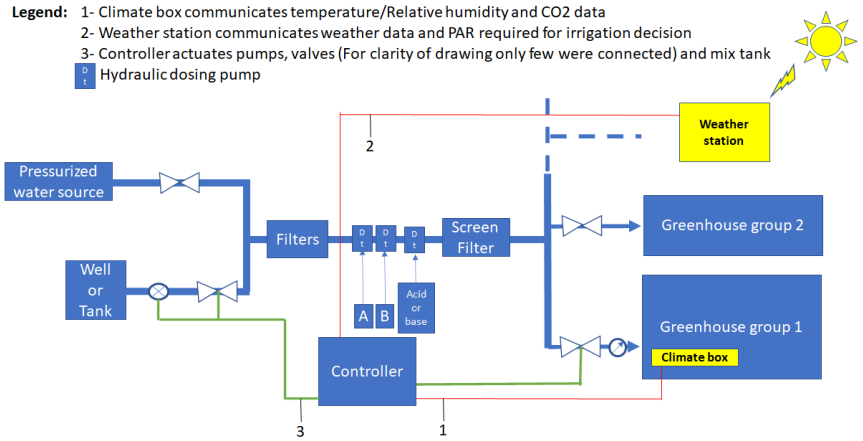
Pivot system

Medium technology

Advanced systems

Goal

- Water and nutrient supply essential for crop production
- Both should not be wasted in a (economic) sustainable production system
- Simple, cheap and effective system is needed



Remarks: The drainage tank and all head unit have to remain inside a shed or room

Meetings with Quantify

- Alinement of the control strategy
- Feedback on the user interface, which control parameters are needed (time of irrigation, radiation sum, interval, EC and pH)
- Step wise approach for software development
    - First automate irrigation strategy
    - Then control EC and pH
- Selection of components used (sensors, pumps, control). Cost evaluation
- Implementation of the software into the hardware
- Demo setup

Issues

- Delivery of some components take more time due to the shortage of chips globally
- Now the components have arrived so a demo is built
- COVID did not allow for a travel to Marocco to assess the current situation
- A manual is to be written based on the actual system
- A follow up where the system is tested in Marocco needs to be formulated. Contacts with CHU Agadir have been made.