SWIM

Sustainable Water/Irrigation Management

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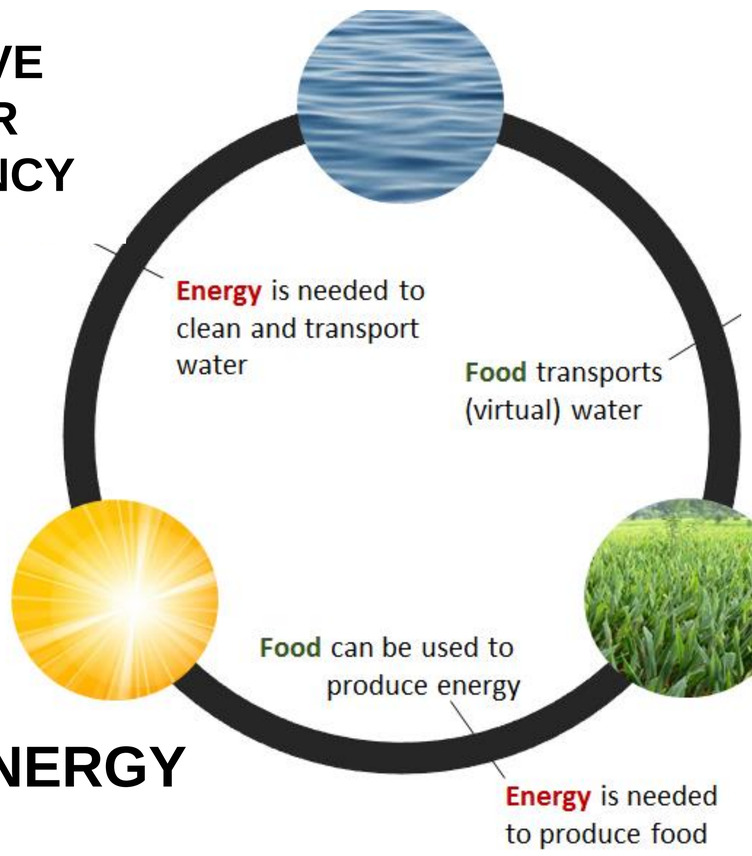
IMPROVE WATER EFFICIENCY



SAVE ENERGY

MORE SUSTAINABLE FOOD PRODUCION

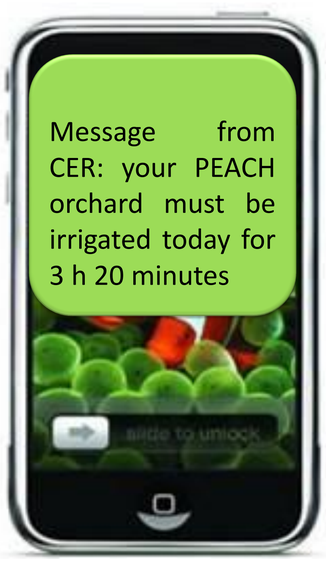
Context analysis

- In most of the region of the word irrigation is inefficient and there is an excess use of the water resource from the agricultural sector. In fact agricultural consume 70% of fresh water at global level (FAO).
  Actually there is not an efficient water management system and managing authorities they don't have any system to monitor the water used by agricultural sector.
- Water scarcity is already present in many region of the word and will be event worse in the future.

Consequently there is a need of efficient water management system!!!!!!

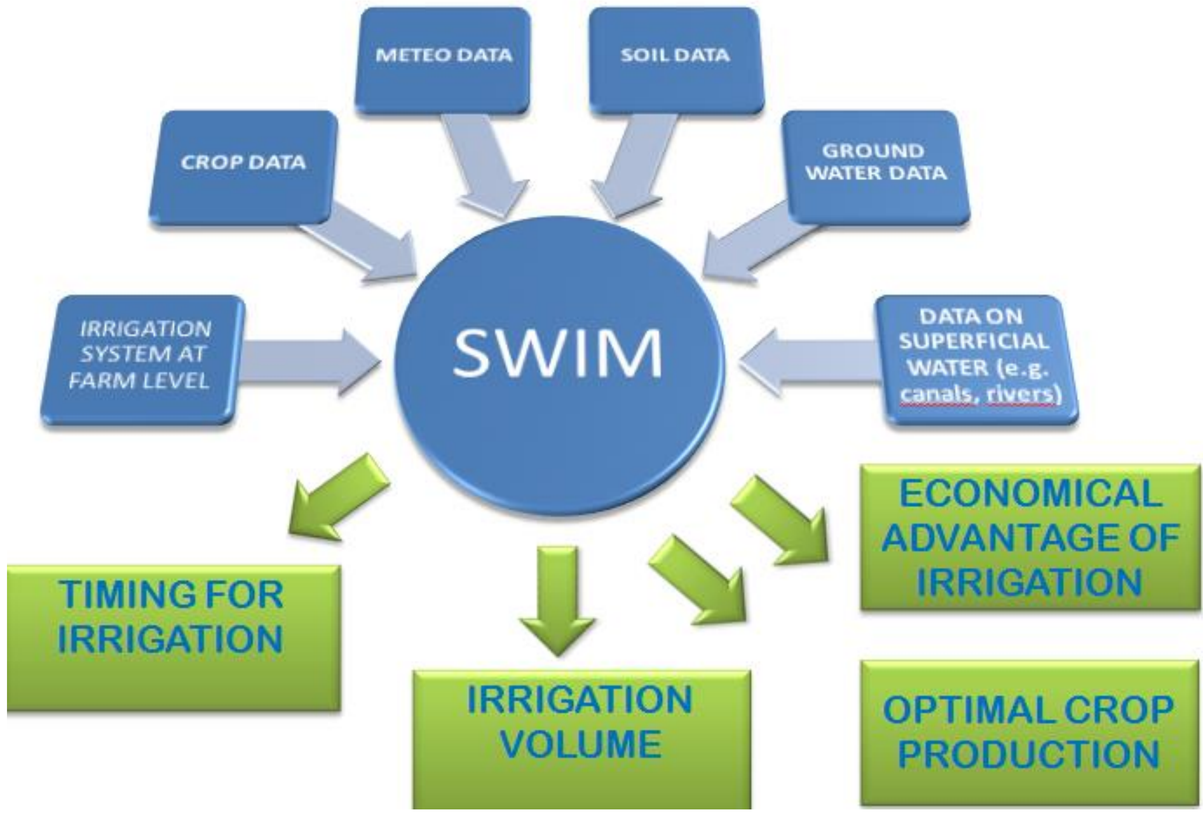
We propose a cooperative and innovative system between farmers and water Managing Authorities with the aim to:

- Given support for efficient water management;
- Save water and indirectly energy;
- Introduce new criteria on water resources governance by water authorities;
- Monitoring water resource and water use;
- Increase the food productivity



The DSS collects data and produces an irrigation schedule different channels. Information is automatically sent via SMS to farmers. Internet connection is not necessary to get the irrigation scheduling and can be apply worldwide.

Farmers need to give info on farm position and the type of crop that they wish to cultivate

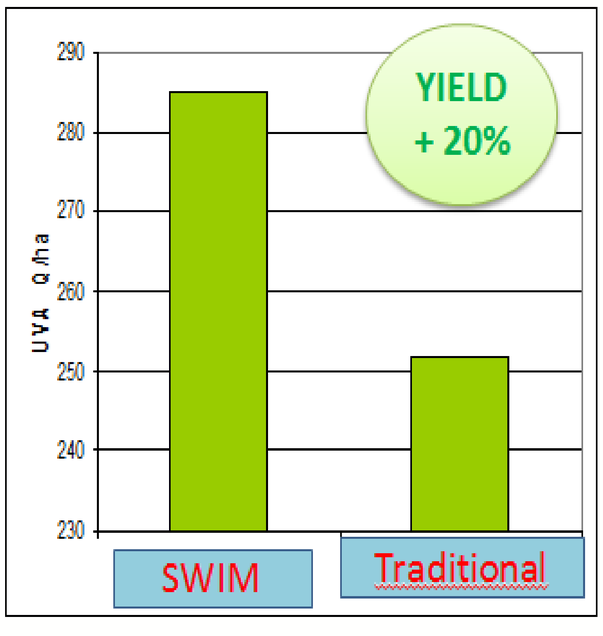


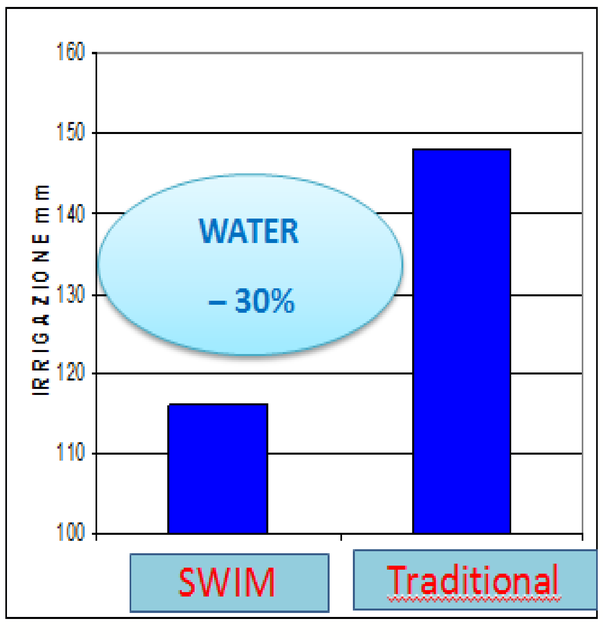
Decision support system for water management

The main beneficiaries:

- ✓Water Institutions and Managing Authorities (i.e. water boards, regional departments, provinces, land reclamation consortia)
- ✓Farmers, agriculture operators, farmers,
- ✓Irrigation Consortia

Scale : micro and macro level from farmer (botton up) to catchment (top down)





Results carried out with a DSS on grapes
Source: CER Emilia Romagna