### **SUSTAINABILITY GROUP**













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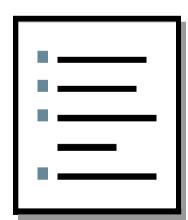
#### **AGRICULTURE PROBLEMS**

 LACK OF IRRIGABLE LAND AND INEFFICIENT USE OF EXISTING WATER RESOURCES

SUSTAINABLE AND PRODUCTIVE USE OF WATER AND LAND

TRADITIONAL FARMING

SOIL EROSION

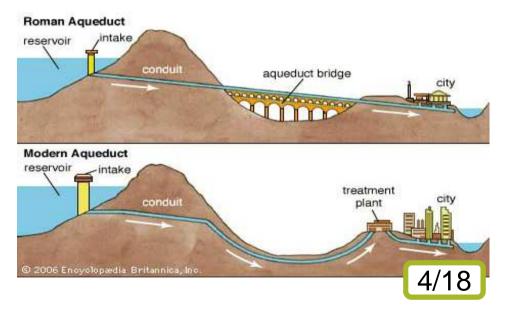


# POSSIBLE SOLUTIONS...

\*NEW AQUEDUCTS: Creating new acqueducts that carry groundwater to the countryside and then distribute it to the population.

#### + Carrying long distance water





\*NEW PIPES: Create pipes under the ground, connected to the canal, to let water flow in order to make efficient use of existing water resources.

#### + Carrying long distance water





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\*NOT TO USE THE SYNTHETICH POISONS TO ELIMINATE PARASITES: These poisons are harmful to people and nature! To control pests, one must follow these three principles: prevention, monitoring and control.

#### + Organic products

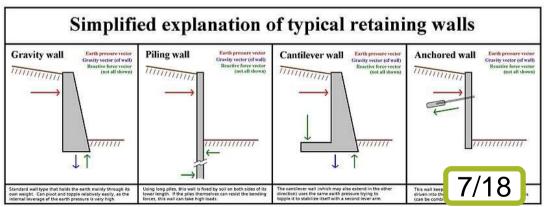




\*USING SUSTAINING WALLS: In some places at river banks are mechanically blocked thanks to the deposit of some types of debris where contact between land and water happens. It is a mechanical block, which prevents water erosion of the soil. On the other hand, they use strips of gabions, formed by wire baskets created a hoc and placed on the point of contact between land and water.

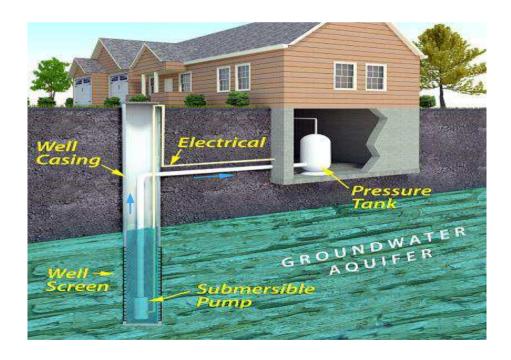
#### + Long lifespan





#### LACK OF IRRIGABLE LAND

❖NEW WELLS: In the absence of water on the surface it is necessary to resort to the excavation of wells to extract underground water, as well as tanks for collecting rainwater.



+ Local water resources

**SUPERFLOUS LAYER:** The layer of compact soil that is placed at 40-50 cm of depth slows down the arrival of the water becoming a problem for the sub-superficial and superficial courses.



+ Easy to apply

**❖DRIP IRRIGATION:** Thanks to the drip irrigation the water comes on to the surface of the plant or the root

#### + Less water is used



\*NATURAL FERTILIZERS: To place a non-irrigable land, you need to take a tiller and do various job and spread several kg of manure and humus on the ground.

#### + More varieties of minerals in the soil





\*USE NATURAL FERTILIZERS: Natural fertilizers are essential for organic farming. This is the aspect that makes it different from conventional growing systems, which uses synthetic fertilizers that are harmful to health. Furthermore, natural fertilizers are beneficial for soil health and increase productivity. Composting stabilizes manure nutrients, contributes to the development of populations of beneficial organisms and has a highly beneficial effect on soils and crops. Compost can be produced on the farm in a variety of ways.

#### + Better for health / organic



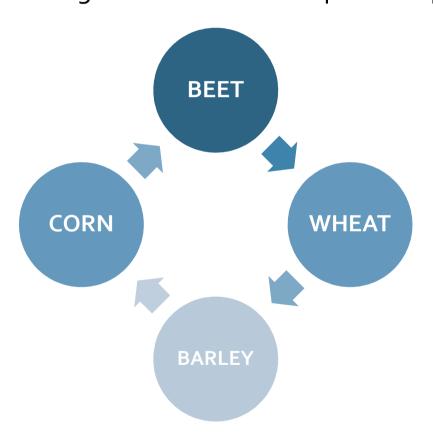


\*GROW MANY VARIETIES OF THE PLANTS ON THE SAME PIECE OF LAND: Organic farming involves more crops in the same space. Agricultural biodiversity ensures many benefits. By planting many varieties of horticultural crops, we offer sustenance to a wide range of useful insects and we promote the development of soil microorganism and other elements thet contribute to the wellbeing of the garden.



+ More (variety) insects like bees

\*ALTERNATE CROPS: Crop rotation refers to the sequence of normals crops and protective crops implanted on a specific field. Particular sequences confer particular benefits to soil fertility in the long and short term and promote phytoprotection.



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## SUSTAINABLE AND PRODUCTIVE USE OF WATER AND LAND

**\*USING OF RESIDUES:** Field residues must be returned to the field itself in the form of manure.

#### + Recyclable -> Less trash





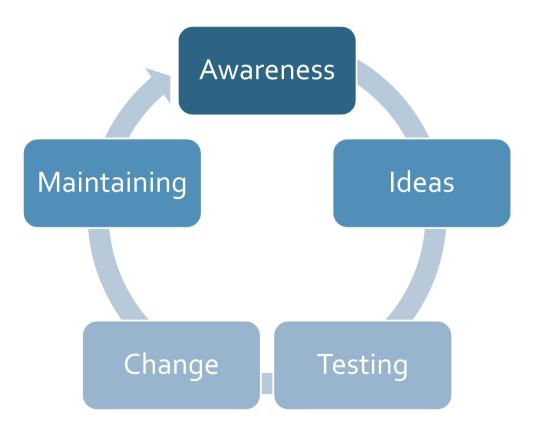
#### **SOIL EROSION**

❖GROWING MORE TREES: This is the best way to prevent the soil from being washed away. Trees, especially those with large and robust roots, can keep the soil intact. Growing a row of trees around a farm can be a good idea to avoid more erosion.



- + Cheap method
- +Better air conditions

#### **MAIN GOALS**



#### THANK YOU FOR YOUR ATTENTION ©













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