

# Biosaline agriculture

- ▶ Growing soil salinity in some regions of the world, along with water resource depletion and deterioration, mainly due to climate change, calls for new techniques in land cultivation.
- ▶ Biosaline agriculture enables the cultivation and production of plants in elevated-salinity environments, at groundwater level, soil level or a combination of both.
- ▶ The International Center for Biosaline Agriculture (ICBA) has been active in promoting such practices since 1999, through research and development programs focused on improving agricultural productivity and sustainability in marginal and saline environments.
- ▶ ICBA helps producers grow non-conventional crops better suited to the high salinity conditions of their areas, as well as master alternative irrigation sources (saline water, treated wastewater, drainage water) to overcome water scarcity.
- ▶ ICBA has supported the implementation of biosaline agriculture programs on the ground in the Middle East, Sub-Saharan Africa and North Africa, including Morocco.

- ▶ In partnership with the Mohammed VI Polytechnic University (UM6P) and the International Development Research Center (IDRC), ICBA has developed the cultivation of quinoa in the province of Rehamna, with varieties better suited to conditions in this central Moroccan region, with highly saline soils and low rainfall. Introduced quinoa varieties are effectively more resilient and resistant to high stress conditions. This enables higher yields than for traditional crops such as wheat, barley or corn.
- ▶ The development of biosaline farming solutions enables satisfactory production yields despite unfavorable conditions and offers more stable sources of income to farmers and populations of marginalized regions.

## References

- Biju-Duval, B., 1994. Océanologie. Paris : Ed. Dunod, Collection Géosciences, p.245. ISBN 2100014641 - ISSN 0988-1018

