



# International funding for up-scaling saline agriculture, state of art

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## Introduction

Commercially attractive farming is possible on moderately to significantly salt affected soils. It requires farming practices characterized by a combination of:

- 1) dedicated freshwater management,
- 2) adjusted soil management including ample green fertilizer application and
- 3) the use of dedicated salt tolerant crop varieties.

Scaling up such practices is a major international challenge as farming practices are embedded in local and regional social, cultural, food pattern and value chain settings. Common reality is that increasing salinity leads to local and regional economic deterioration and in the end to abandoning the lands. This creates increasing pressure on the remaining arable and virgin lands and ultimately poses a threat to regional and international food security.

This poster discusses the state of the art of international funding organizations in addressing this issue. The focus is on development banks such as the World bank, the African Development Bank, the European Development Financial Institutions and the dedicated internationally operating Climate Funding Organizations. An international workshop was held in Brussels to discuss the state of the art with presentations by various financial institutions in April 2024 (<https://www.saline-agriculture.com/en/calendar/salad-sustain-conference-saline-agriculture-state-of-the-art-and-the-prospects-of-impact-investment>).

## THE FINANCIAL ‘LANDSCAPE’

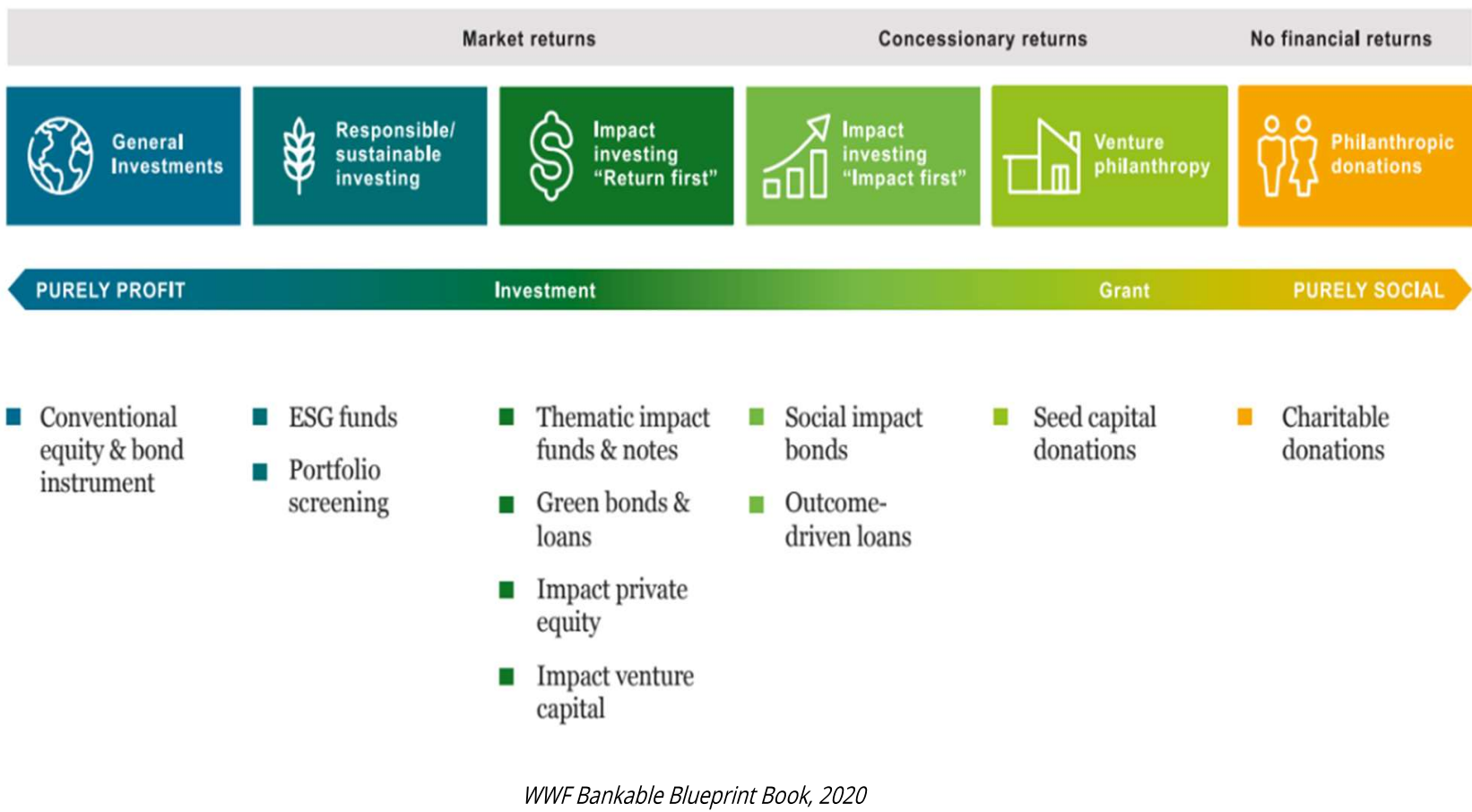


Figure 1: The Financial Landscape (Brand, 2024)

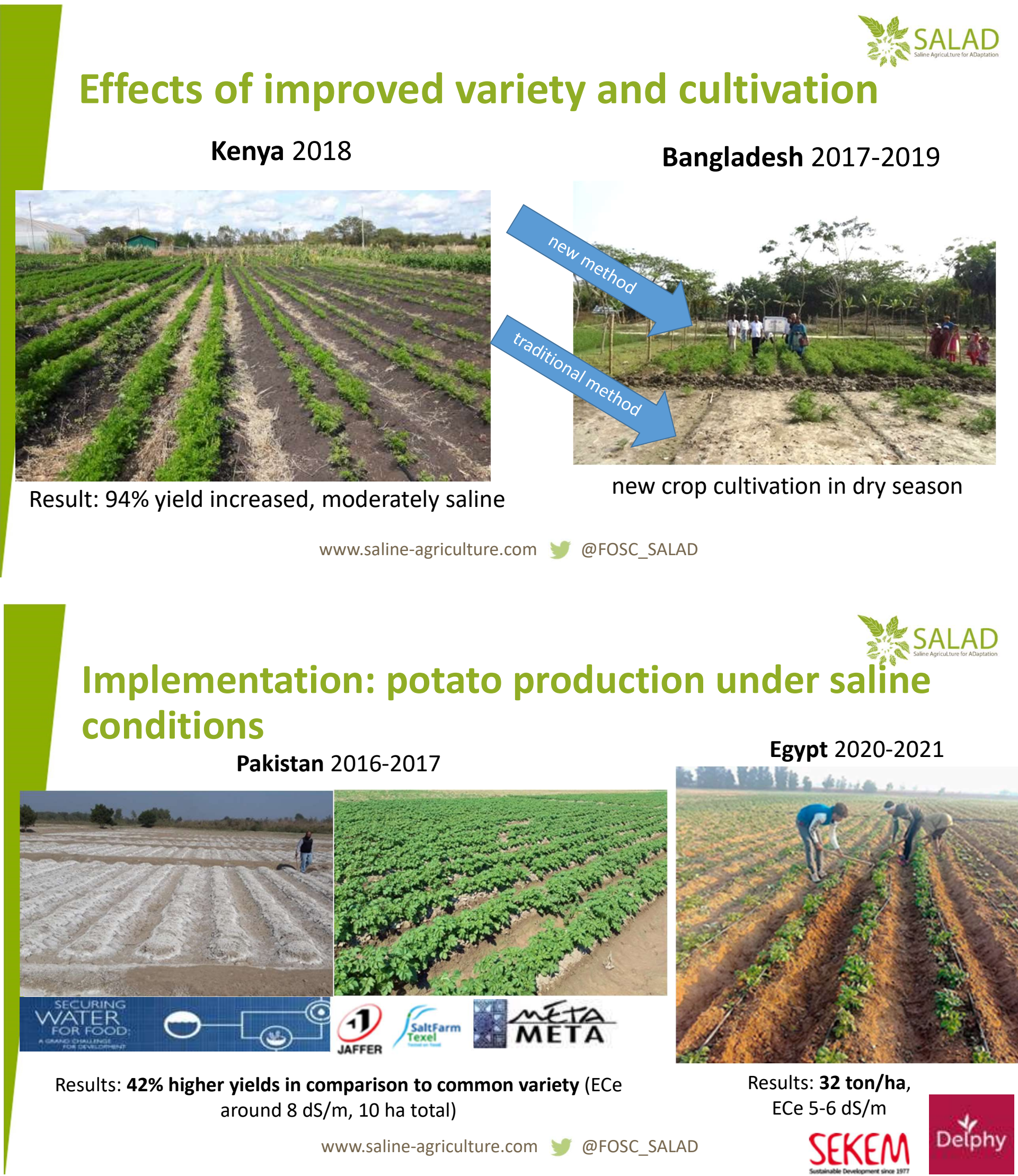
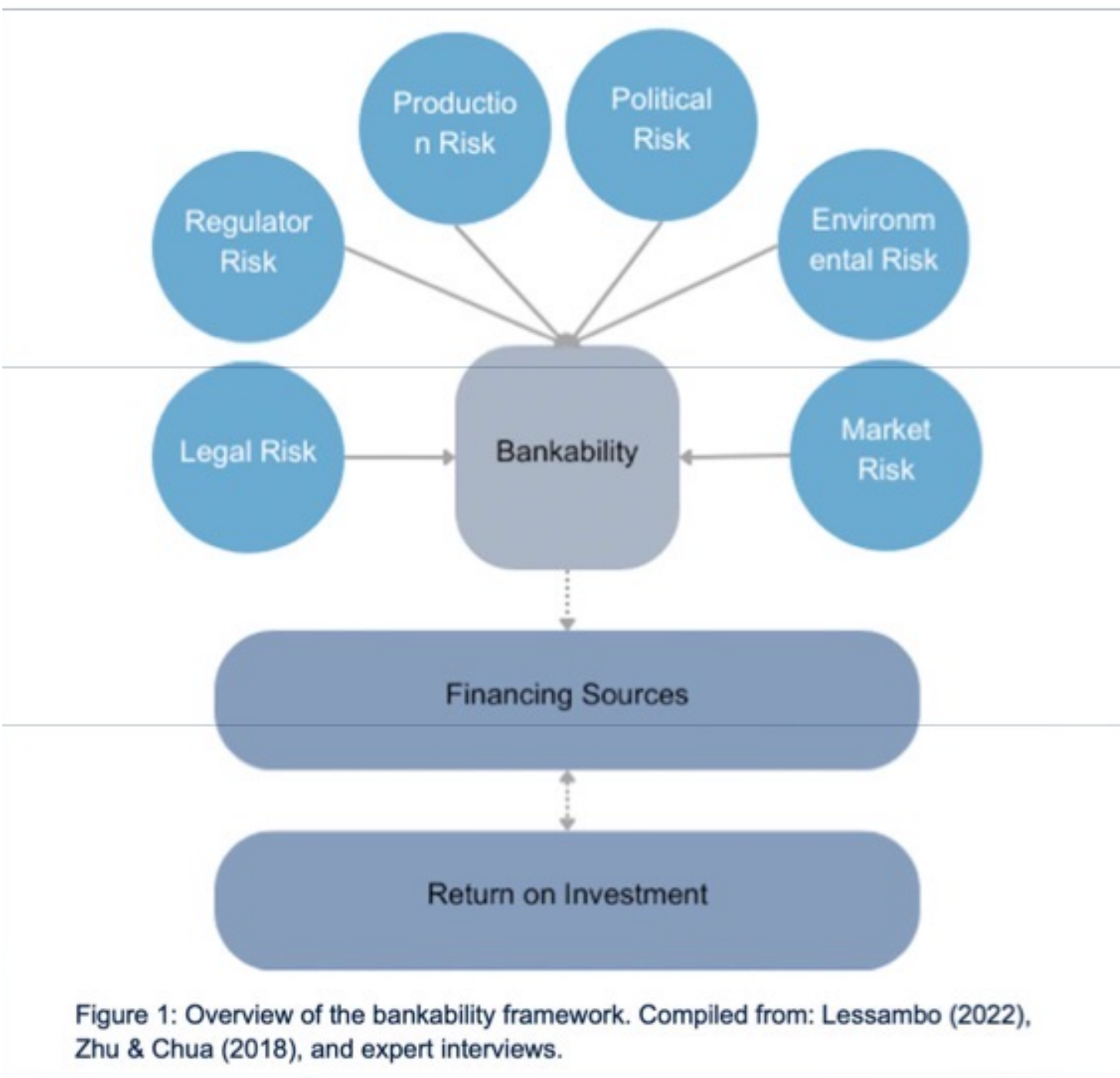


Figure 2: Successful Business Cases (The Salt Doctors, 2024)



Risks	Description	Sources
Environmental	Droughts, heat, salinity, water-scarcity	Hallam et al. (2021); Oumara (2022); FAO and AWC (2023)
Production	Yield-variability, low-quality	E1, E4; Choukr-allah et al. (2016)
Market	Lack of access, small market size, variable price, high quality requirements	Hirich et al. (2021); Rafik et al. (2020);
Political	Relatively stable, strong subsidies in place	(Hallam et al., 2021); Economist Intelligence (2022)
Legal & Regulatory	Clearly defined laws, and relatively efficient regulations.	E1, E2; (OECD, 2021)

Figure 3: MSc Thesis on Bankability of Saline Agriculture (Heer, 2024, Vrije Universiteit ERM)

## Conclusions

1. Development banks and climate funding organizations increasingly recognize the need for financial support for agriculture in view of climate change and freshwater scarcity. Saline agriculture would fit under the term Climate Smart Agriculture and under the heading Adaptation to Climate Change. The notion of saline agriculture as a theme is not explicitly recognized (yet).
2. Funding organizations have difficulty in reaching out to farmers and agricultural practices at the local and regional level. The scales of funding: demand and supply do not match. Programs and projects assisting farmers and farmers organizations require funding at the scale of 0.1 to 1 million euros while international funding organizations operate at the scale of 10 to 100 million euros.
3. Micro-finance organizations are better equipped to reach out to farmers and farmers organizations. However, the commonly required return on investment in micro finance schemes is too high to be commercially attractive for farmers and farmers organizations.
4. The upscaling of successful pilots requires two major actions:

### a) National governments should:

- 1) recognize the problem of salinity, and develop national policies, and
- 2) highlight such ambitions and policies in their National Adaptation Plans submitted under the International Climate Change regime (UNFCCC).

### b) International development and finance organizations including climate funds should

- 1) develop dedicated programs to address the upscaling of successful saline agricultural practices, such programs should include a combination of grants and investments and focus on large scale pilots and training.



Workshop participants, Brussels April 2024

