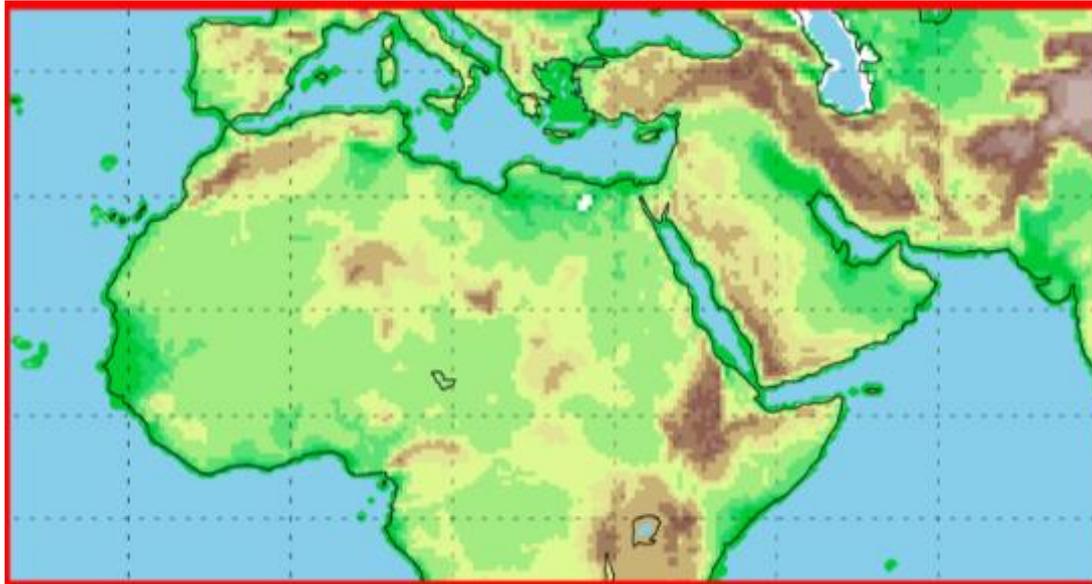


# Prospects for a Regional Network of *AquaCrop* Practitioners

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## Expected Accomplishment

Enhancing capacity of technical governmental (and non-governmental) staff to assess impacts of climate change on agricultural production in the Arab Region



## Methodological Approach

- 1.** Use of RICCAR projections of climatic variables as inputs in simulations of crop response to climate change
- 2.** Use of *AquaCrop* as crop model to simulate the crop response to climate change
- 3.** Establishment of **Technical Teams** from 10 countries (Algeria, Egypt, Iraq, Kuwait, Jordan, Lebanon, KSA, Sudan, Syria & Tunisia)
- 4.** ACSAD provided a series of training workshops, training on-the-job, and field trials, to the technical Teams to enhance their capacity as per “expected accomplishment”



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# The construct



- The experience, skill and expertise developed by ACSAD in using *AquaCrop* dates back to 2014 and is significant
- Similarly, the Technical Teams of the ESCWA Project have developed relevant capacity in the use of *AquaCrop*
- Why not to leverage on these 'resources' and 'capacities' to establish an Arab Network of *AquaCrop* Practitioners to scale-up capacity development in the Region ?
- In fact, the crop simulation peculiarities of *AquaCrop* are such that the model can be used for several purposes, other than the impact assessment of climate change, including: optimization of irrigation scheduling (either full, deficit or supplementary); improvement of soil-moisture control-practices; development of strategies for increased water productivity and water saving; benchmarking yield and water-productivity gaps; optimization of planting dates, etc.

## The prospect

- The overall responsibility for *AquaCrop* development, maintenance, dissemination, and other related programmes, is vested in FAO HQ (Land and Water Division)
- There is a recognized need by FAO to expand its capacity to:
  - ✓ outreach a broader bases of *AquaCrop* 'practitioners'
  - ✓ provide an adequate 'training carrying capacity'
  - ✓ ensure a continuous flow of 'feedbacks from the field'
  - ✓ to provide a systematic 'update' of the model over time
- There is a need to enlarge the present configuration of the *AquaCrop* 'Core Group' (the team of people taking care of *AquaCrop* in terms of calibration, software update and development)

# The proposal

- At the present, the *AquaCrop* 'Core Group' has a very simple governance and limited outreach capacity (5 professionals with one coordinator in Rome, meeting once a year to address status, progress and new requirements of *AquaCrop*)
- We are proposing to establish **Regional Networks of *AquaCrop* Practitioners** to safeguard the long-term sustainability of *AquaCrop*
- The Networks would include **selected Institutions** undertaking different tasks, including: training; field calibration/validation; further programme development; update of algorithms and software, etc.
- These Institutions would be seen as 'centers of excellence' and would be accredited by FAO to assume specific roles within the Network
- **ACSAD** would be the natural **Coordinator** of the Network of *AquaCrop* Practitioners for the Arab Region

# The road map

## 1

Dr Ihab and myself will participate in a *FAO AquaCrop Workshop* next week (1-2 December 2019, in Tunis) addressing the following points:

- Develop a FAO strategy for a medium and long term support to *AquaCrop*
- Discuss the possible configurations and governance of Networks of *AquaCrop* Practitioners, along with related financial implications
- Propose a comprehensive approach for the training, dissemination, and the development of new applications of *AquaCrop*

## 2

Based on the outcomes of the *FAO AquaCrop Workshop*, ACSAD, ESCWA and FAO would organize a **Regional Workshop** with the participation of key representatives of the ten-country technical teams aiming at the following objectives:

- to report on the outcomes of the *FAO AquaCrop Workshop* of December 2019
- to discuss the configuration, governance, responsibility, financial implications and Terms of References of the Regional Network

### 3

To develop an effective and relevant “Arab Network of *AquaCrop* Practitioners”, in addition to individuals’ strong interest and motivation, it is necessary to leverage on the Institutional ownership and commitment

ACSAD, ESCWA and FAO would organize a visit to each Institution of the Technical Teams to meet the various Heads of the various Department, or other high-level authorities, to explain the Network initiative, its value, the related financial implications and the overall benefits that the *AquaCrop* Network can bring to their organization

It is expected that each team will be recognized for their capacity and added value to the *AquaCrop* Network, and that the Institution where the technical team belongs to will possibly be given an 'accreditation' from FAO

Ultimately, the benefits of this overall operation would be not only in terms of scaling-up capacity development, but also as **opportunities** for participations in future projects, which in turn would make available more financial resources, and for opening more towards international teams

At the moment, the major unknown is the 'financial' dimension. Resources mobilization will definitely be required



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# Thank you

