

3rd MEDITERRANEAN FORUM

FOR PHD STUDENTS AND YOUNG RESEARCHERS

Understanding Mediterranean Agriculture Food Systems and their Supply Chain Actors Under Local, Regional and Global Uncertainty



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A BIO-ECONOMIC MODEL TO IMPROVE IRRIGATED DURUM WHEAT PERFORMANCE AND REGIONAL PROFIT IN MEDITERRANEAN CONDITIONS

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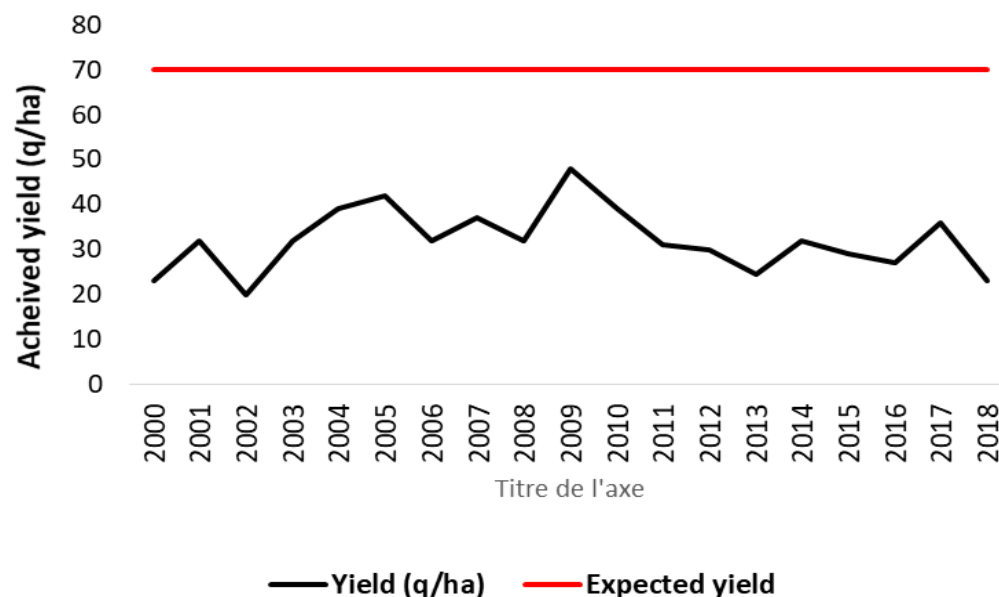
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1 INTRODUCTION

Irrigated Durum wheat



Expected yield:

70q/ha

Acheived yield:

36 q/ha





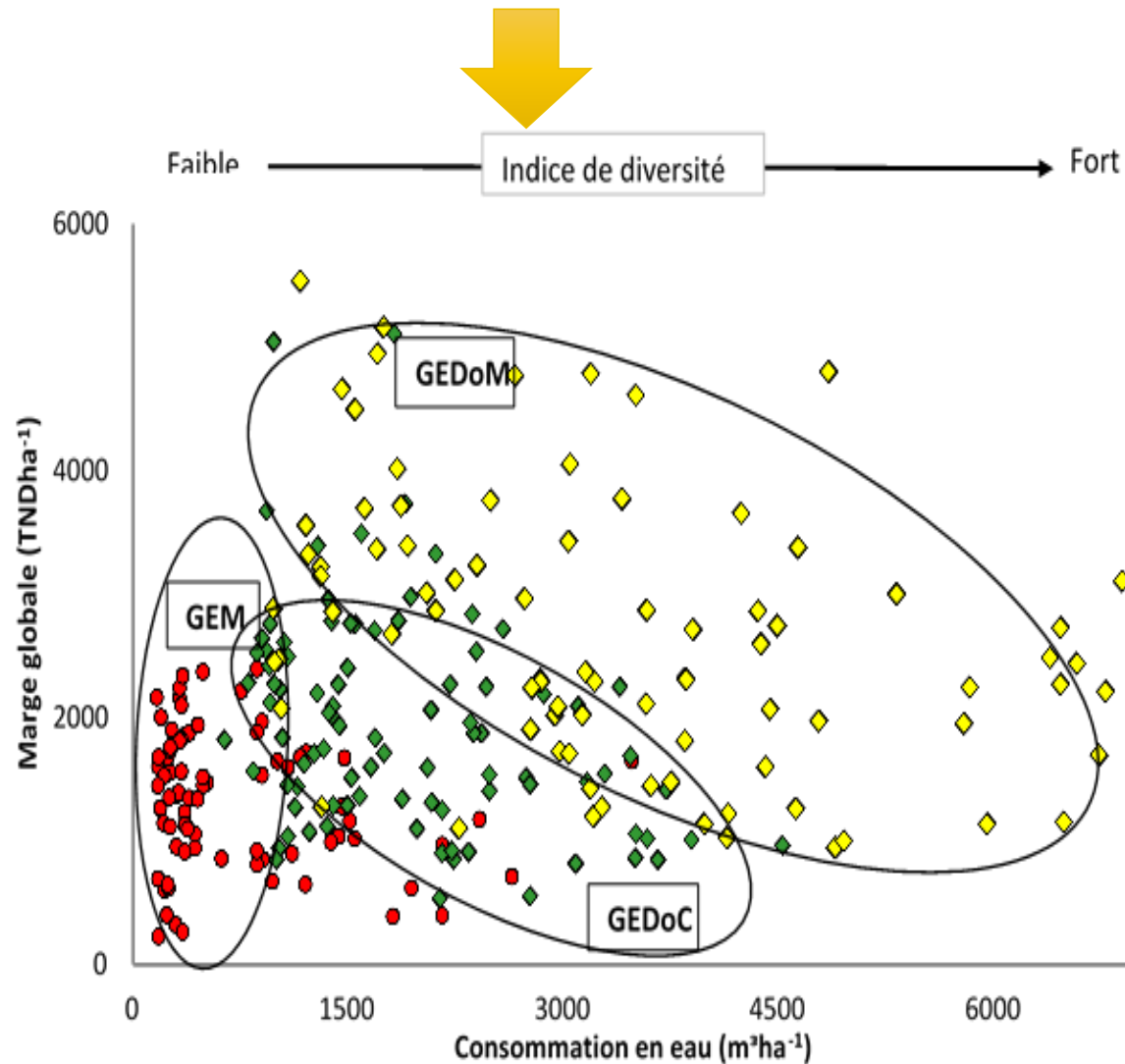
Objectif

This work aims to highlight the main levers for improving the performance of Durum wheat crop and the regional profit.

MATERIALS AND METHODS

Typology of farming systems

(Mazhoud et al., 2020)



4 RESULTS AND DISCUSSION

Table 1 Descriptive analysis

Variables	value
Yield (q/ha)	40
Water productivity (kg /ha/mm)	7.6
Total production of durum wheat	9367
Gross Margin (TND/ha)	509

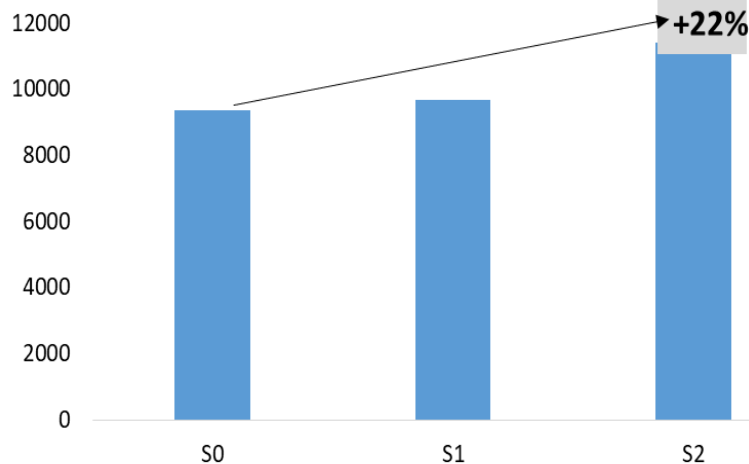
4 RESULTS AND DISCUSSION

Simulation of scenario

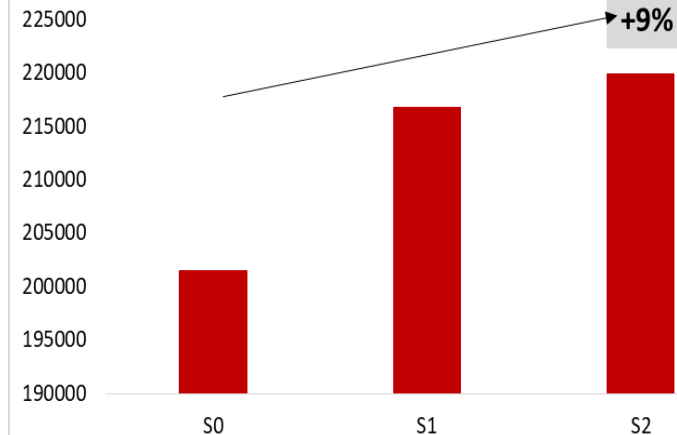
S1 : Control of irrigation

S2 du prix de vente du blé de 20%

Production of durum wheat(Tons)



Profit(TND)




The bio-economic model allowed to identify main levers relate to

- The control of irrigation**
- The increase of cereal price.**



The concretization of these paths requires a concerted reflection between the actors to put forward suitable strategies according to the studied context.

A close-up, low-angle shot of a field of golden wheat. The wheat stalks are tall and dense, filling the frame from the bottom to the horizon. The sky is a clear, pale blue. The text "Thank you for your ATTENTION" is overlaid in the center of the image.

Thank you for your ATTENTION