1st Mediterranean Forum for PhD Students and Young Researchers

Designing Sustainable Agricultural and Food Production Systems
under Global Changes in the Mediterranean
18-19 July 2016, Montpellier, France

CIHEAM

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Agricultural household effects of promoting olive oil production changes for smallholder farmers in dry land area*

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Medina

Introduction

Drylands

Study area

Sidi-Bouzid

Demographic pressures

Climatic pressures

Threating

Food consumption

Incomes

Natural ressources

Food expenditures are 38% lower than national average

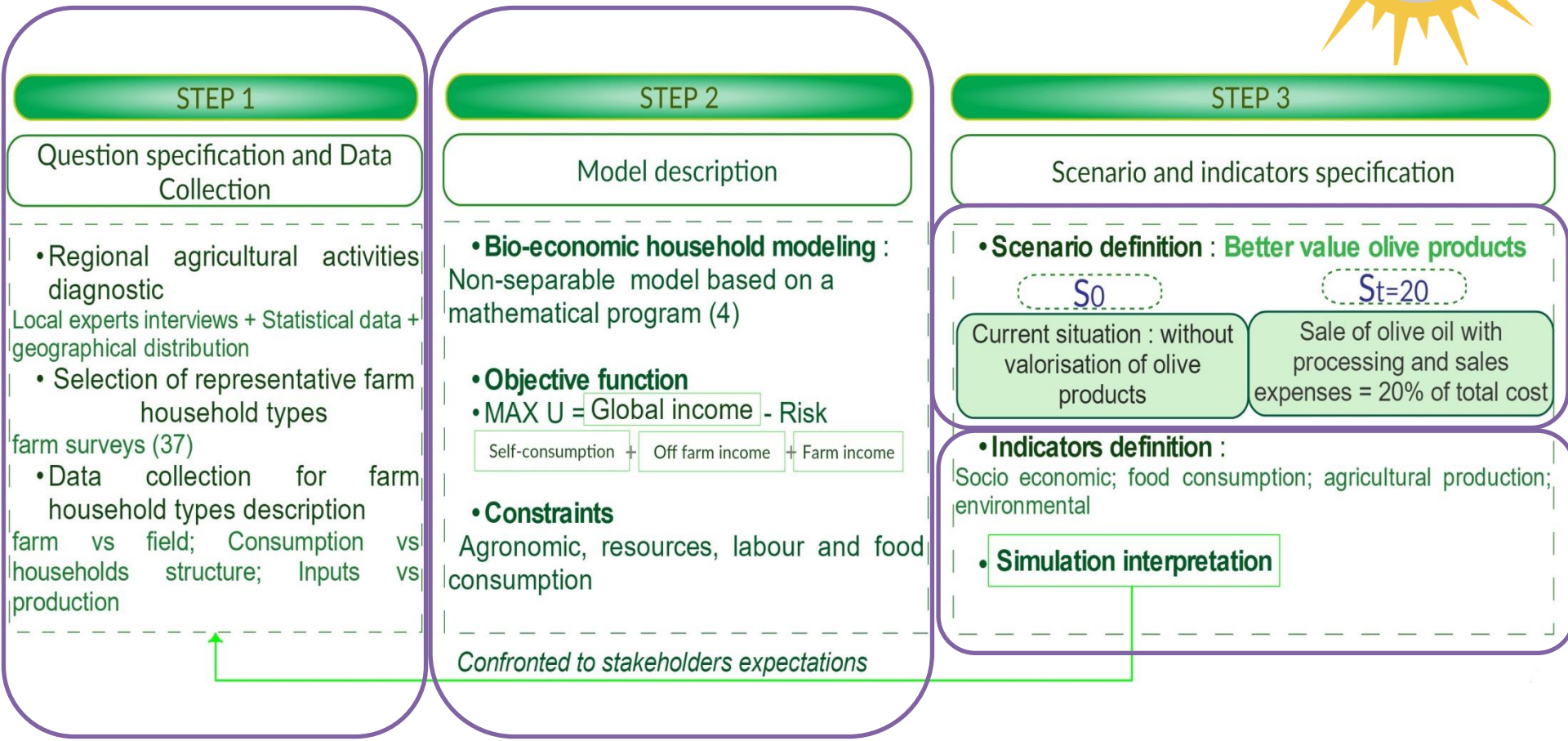
It is the poorest region in Tunisia where Farmers and agricultural workers incomes are the lowest

It faces the issue of Ground water overexploitation (835 surface wells abandoned in 2010)

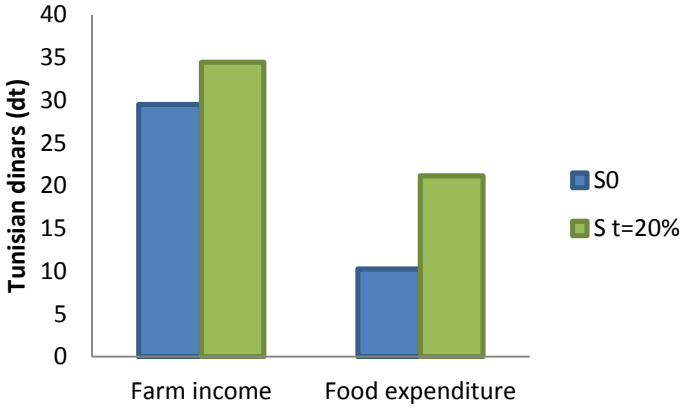
- Today; the challenge for policy makers in dryland region is to **design and assess incentive policies** for rural population livelihoods while preserving the environmental integrity.

- The aim of this work is to assess, by using a **non linear farm household bio-economic model**, the productivity, food consumption and environment impacts of incentive agricultural policy.

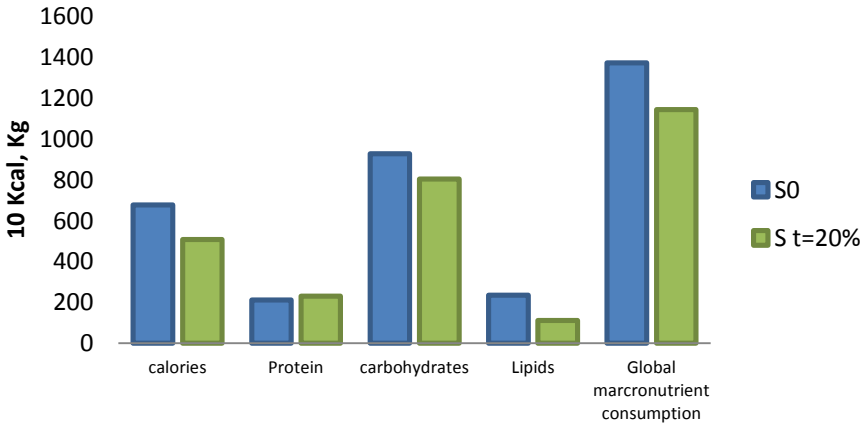
Materials and methods



Résultats et discussions



The opportunity of selling olive oil pushes the household to choose the market for his diet which doubles his food expenditures and decreases his self-consumption.



Despite these increases, household food consumption is quantitatively deteriorated with a global loss of 19% in macronutrient consumption

Conclusion

- These results reflect disconnection between agriculture and nutrition in Tunisia where farmers foster monetary gain at the expense of food consumption.

- The simulation shows that this incentive policy scenario must be accompanied by nutritional measures.

- The method used for this study can be applied to other contexts in arid areas were the production is more or less driven by consumption. However; this requires adapting the database and certain constraints of the model.