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## Introduction

The criteria for sustainability at the farm level have gradually conformed to the three dimensions and pillars of sustainability: economically viable, socially equitable and ecologically reproducible. Landais (1998) defines sustainable farming as "a viable, liveable, transmissible and reproducible farm". This is the most widely used definition in the French-language scientific literature according to Zahm et al. (2015).

Many researchers and associations have created methods to assess the sustainability of a farm. There are an extremely large number of evaluation methods (more than 120) assessing different characteristics, using different indicators and meeting different objectives. (Richard, 2010). One of these methods is IDEA which will be used in this work to assess the sustainability of thirty olive farms.

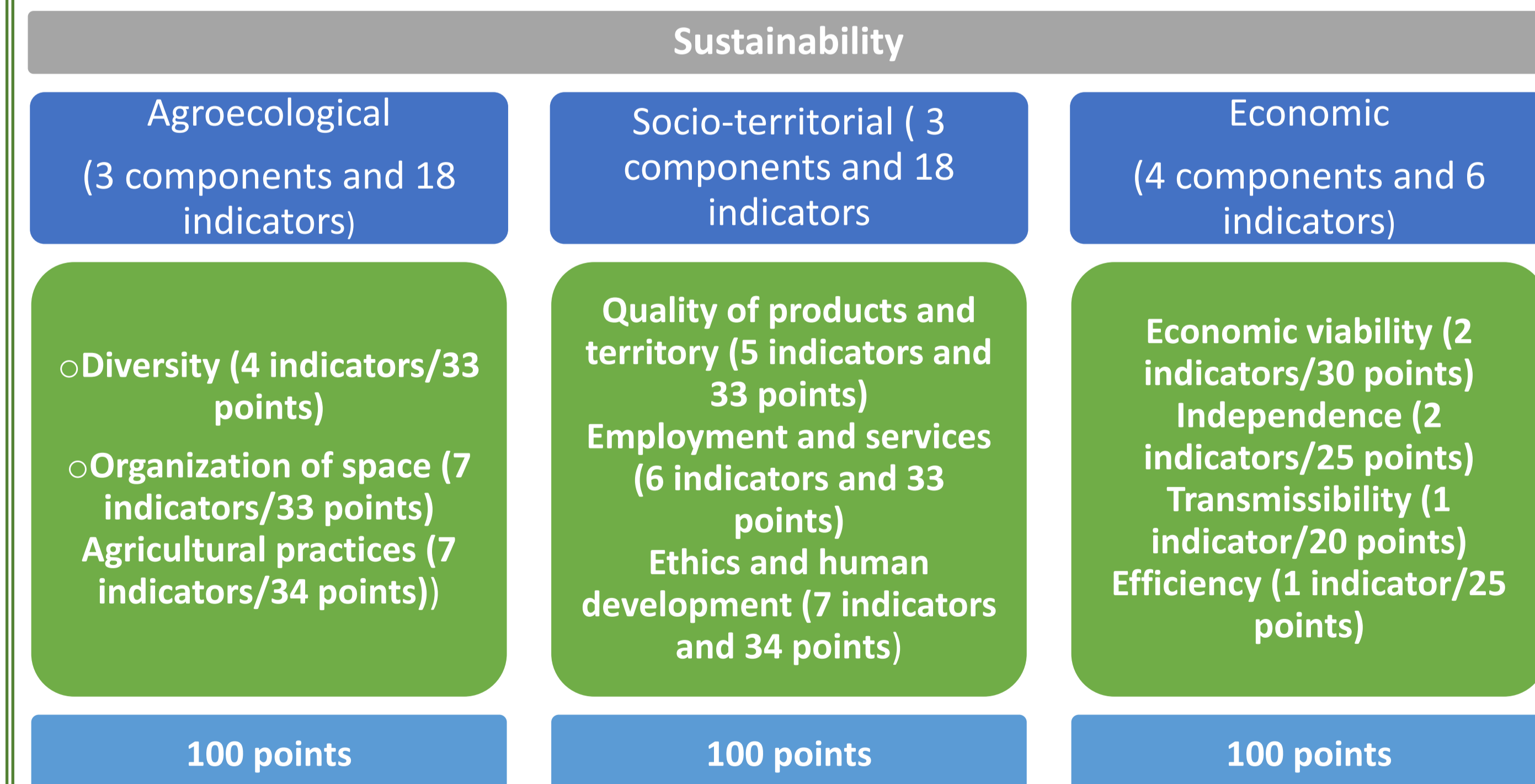
## Methodology

It is based on the analysis of survey data carried out on thirty olive farms in the Djelfa region. The questionnaire was designed to meet the indicators of the IDEA grid. The results of the surveys were filled in and processed on Excel.

## What is the IDEA method?



It is based on the quantification of the various components of an agricultural system by assigning it a score to obtain a score for each of the three scales of sustainability (agroecological, socio-territorial and economic). The three scales are of the same weight, capped at 100. IDEA has contributed to numerous academic research works on the assessment of the sustainability of agricultural systems. It is highly mobilized by various agricultural development structures (Zahm et al. 2019)



## Results

### The scores obtained

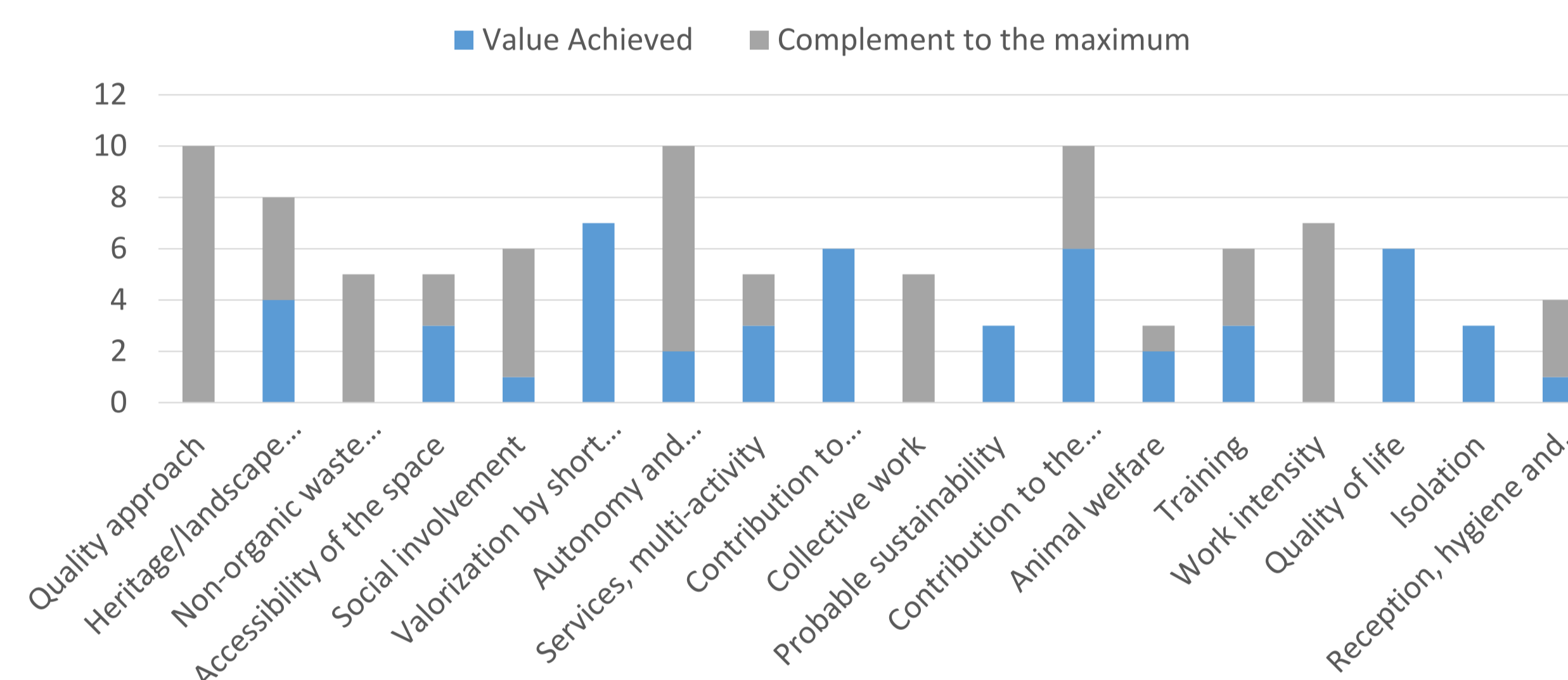
Scales	Agroecological	Socio-territorial	Economic scale
All farms	56	31	61
Farms with livestock	62	37	71
Farms without livestock	51	27	68

## Examples of results achieved

### Most sustainable farm

Agroecological scale	Socio-territorial scale	Economic scale	Sustainability rating
69	50	76	50

### For the socio-territorial scale, what are the most sustainable indicators and the indicators to be improved?



### Least sustainable farm

Agroecological scale	Socio-territorial scale	Economic scale	Sustainability rating
51	10	82	10

### What are the most sustainable components and the components that need improvement?



## Conclusion

The surveys carried out on 30 olive farms in the study region made it possible to analyze the sustainability within these farms through its three scales and to highlight a set of practices limiting the sustainability of these farms. The results show that the overall trend is the same for all farms: they are sustainable on an economic scale with an average of 69, less sustainable on an agroecological scale with an average of 56 and rather unsustainable on a socio-territorial scale with an average of 31. It appears that farms with livestock have a better sustainability than those without livestock with a score of 62 for the agroecological dimension, 37 for the socio-territorial dimension and 71 for the economic dimension compared to 51, 27 and 68 respectively for farms without livestock. This shows the importance of diversifying farm activities for better sustainability.