

Main drivers and barriers for legume production in the Northern region of Portugal

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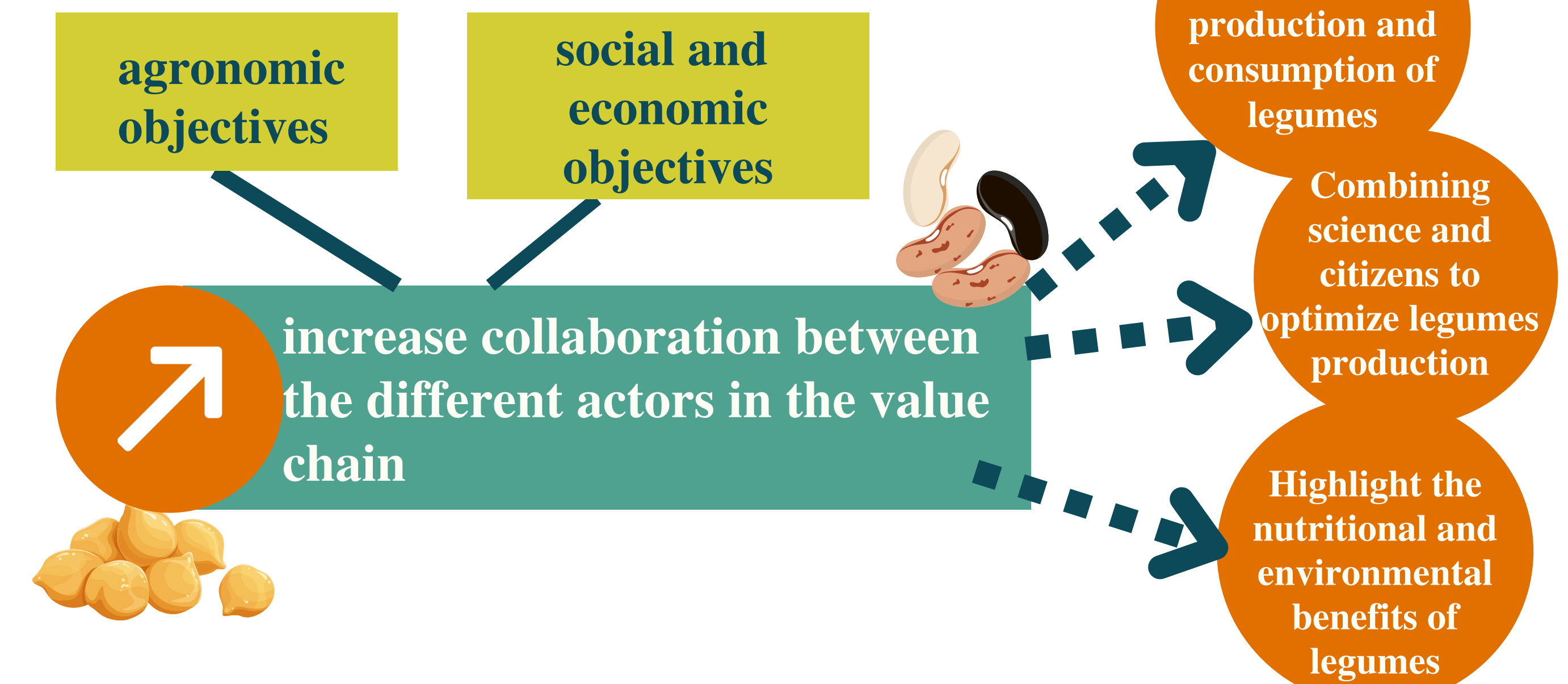
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Introduction

The LeguCon project aims to develop the first consortium in Portugal, promoting the increase in the production of legumes in the country, with a participatory and interactive aspect between science and citizenship. Created in 2021 and funded by the Calouste Gulbenkian Foundation, it promoted a participatory science competition aimed at producers in the Northern Region, which resulted in the selection of 6 participatory farms and the consequent production of legumes on their fields.

What are the chosen legumes that best adapt to the production conditions in the North of Portugal?
What are the barriers and the drivers?

Objectives



Methods/ Results

For the development of the participatory science trials, the conditions for participation should ensure that farmers would have about 1 hectare of land to produce legumes and, on the other hand, receive full technical support during the development of the installed legumes.

We received 36 applications from potential farmers interested in joining Legucon

6 farmers were selected

The criteria established for the selection of potential participatory farmers were:

- geographic distribution;
- availability of at least 1 ha for the trial;
- absence of previous cultivation of legumes in the plot available for the trial;
- motivation to collaborate in scientific development and demonstration of results

The trials started at different dates depending on the participants, mainly due to adverse weather conditions in certain regions and soil temperature, which forced a delay in sowing. The harvest date also varied on the 6 participatory farms and in most of these, it was carried out manually due to the lack of adequate machinery.

2 crops produced: chickpea and cowpea



André Martins, Barcelos, Chickpea



Joana Correia, Entre-os-Rios, Cowpea (OF)*



Nuno Oliveira, Guimarães, Cowpea (OF)*



Tiago Padrão, Maia, Chickpea



Tiago Pinto, Amarante, Cowpea



Paulo Eurico, Paredes de Coura, Chickpea

*OF- Organic farm

Some drivers identified

- Promoting soil structure and health
- High marketing demand;
- Promoting crop diversification and agrobiodiversity
- New income source
- Sustainable agricultural practices

Some barriers identified

- Difficulty in controlling weed plants
- Maturation of cowpea was heterogeneous
- Low adaption of chickpea to high humidity conditions;
- Inadequate existing harvest machinery

Conclusions

- Dedicated political, financial and technological support measures are necessary to increase legume production in Portugal.
- Strong technological and scientific developments are still needed to make these crops more attractive (e.g. weed suppression).
- The integration of all actors of the legume value chain reduces the risks associated with investing in a new culture.

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