

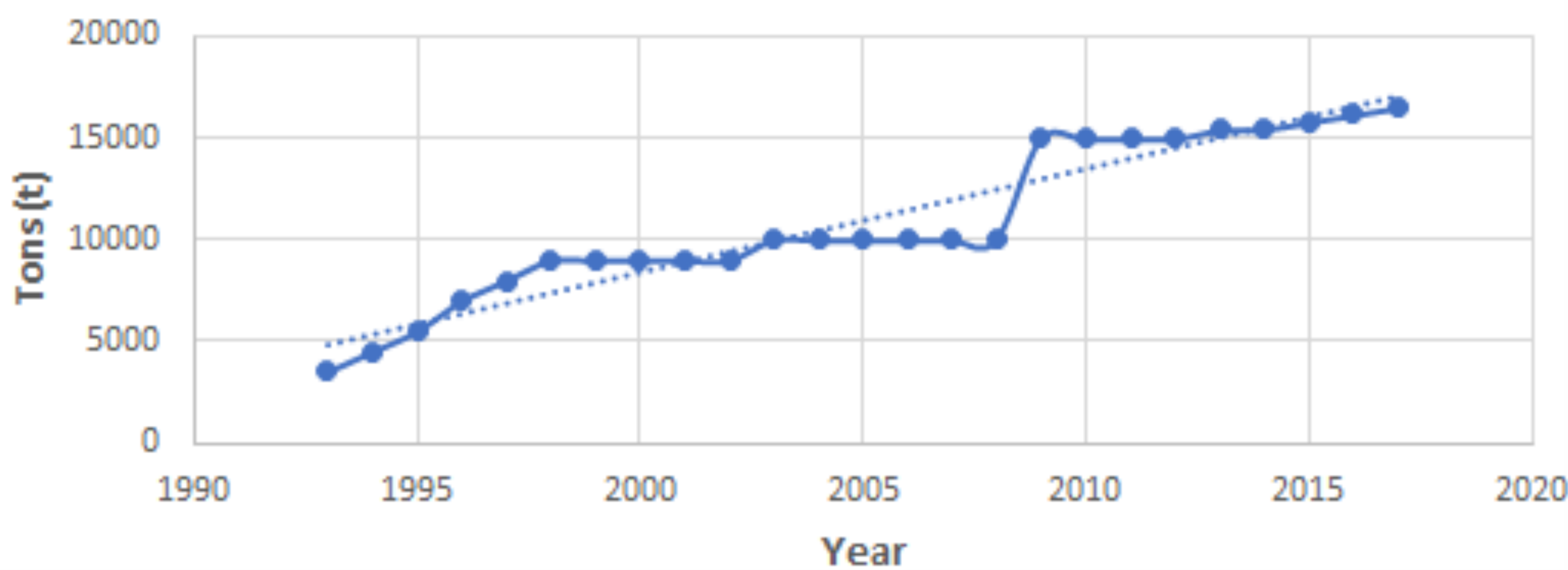


OBJECTIVES

- Understand the **current situation** of snail farming
- Promote the knowledge of this type of **alternative production**

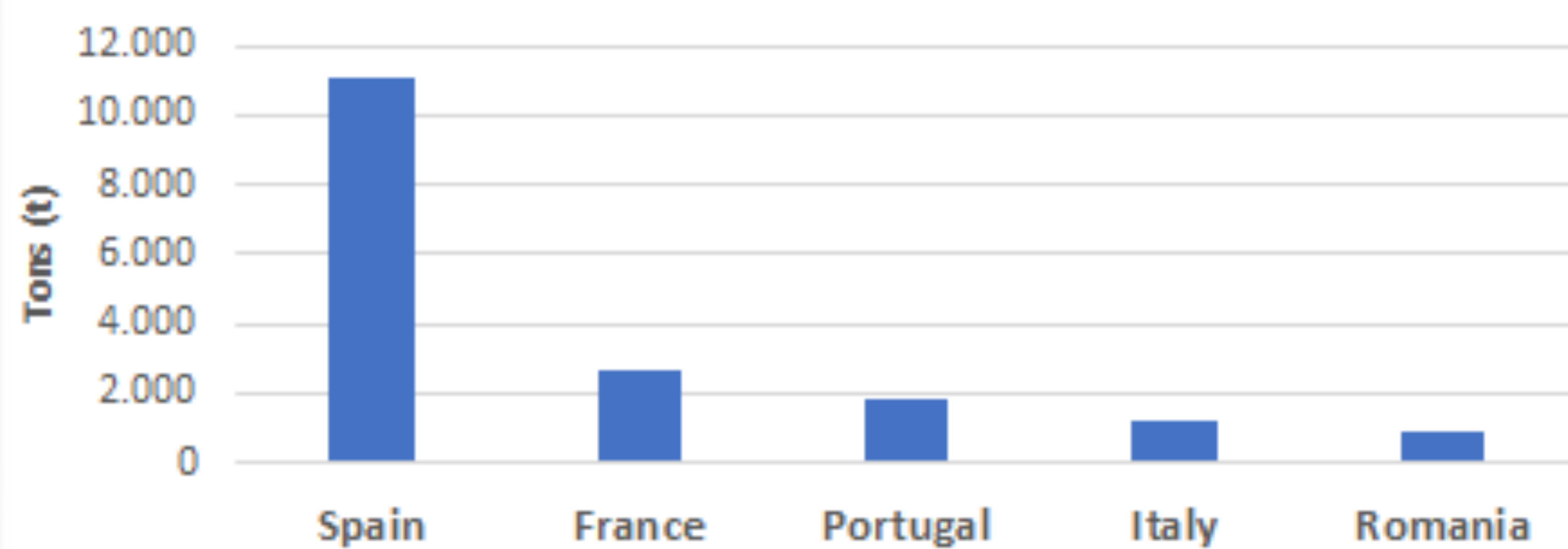
CURRENT SITUATION

Morocco edible snail production evolution*



Morocco, one of the major producers of edible snails in the world, is a great example of the **global growth** in snail production during the last years. Moreover, there is an evident increasing trend for the next years. **European countries**, specially France and Spain, are the main consumers in the world. However, these countries have a large product deficit which they compensate with great imports

Main importing countries in Europe (2017)*



SNAIL REARING

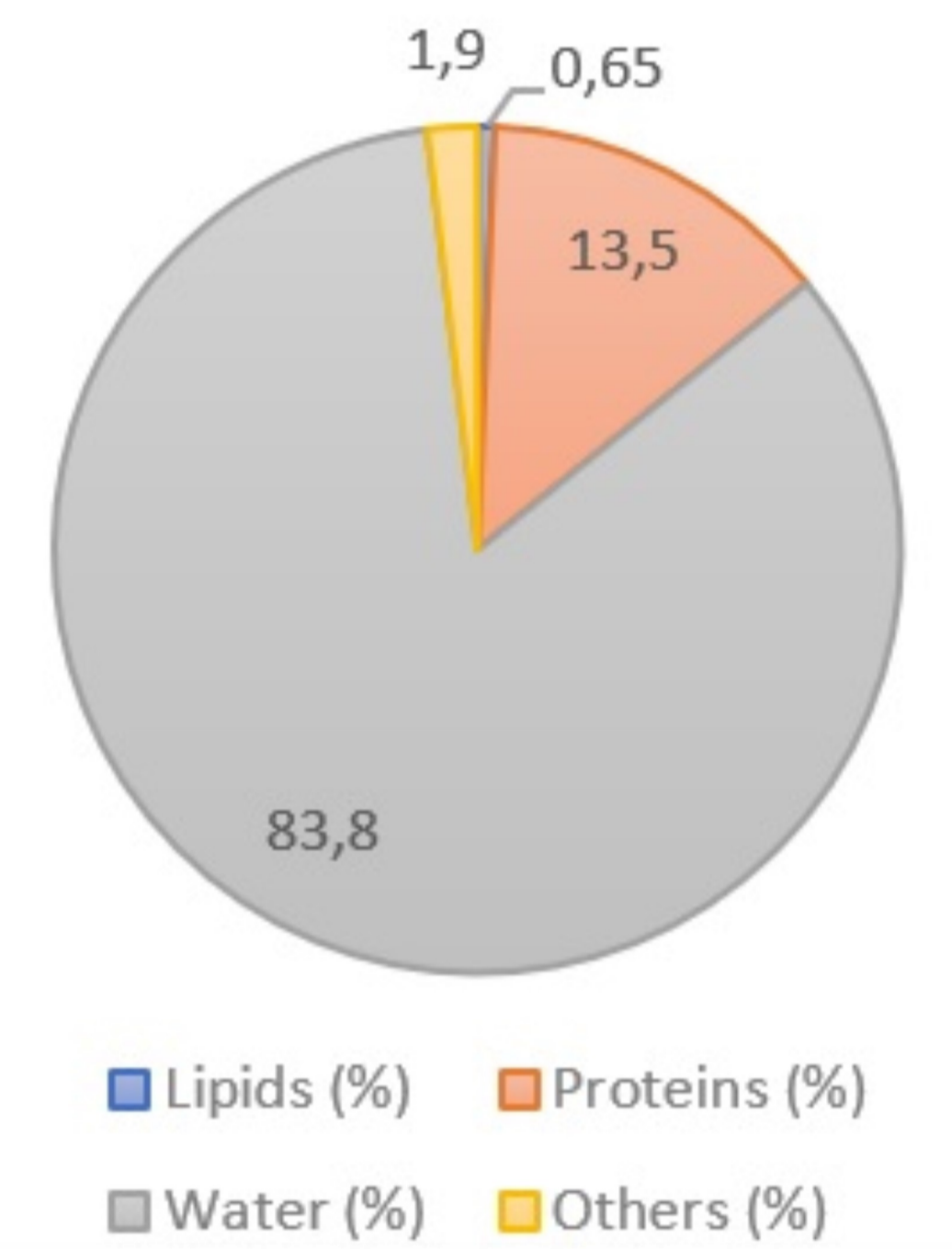
Due to its production traits and organoleptic properties, *Helix aspersa* is the most common species used in snail farming. These gastropods have peculiar needs; thus, environmental, behavioral and nutritional requirements have been widely studied. There are three main production systems: extensive, mixed and **intensive** which is the predominant in places like Catalonia. Ecological production type is increasing

Requirements	%
Protein	15.40
Crude Fibre	1.50
Crude Fat	6.10
Ash	46.30
Calcium	16.20
Sodium	0.24
Phosphorous	0.25

DERIVED PRODUCTS

The main product obtained from edible snails is their **meat** which has an excellent nutritional value. Other products such as their eggs, their mucus and their shell are profited. Furthermore, snails have been largely used as **biomarkers**

Snail meat composition



General view of a snail farm

Control Points (CP1-CP7)

- CP1 (facilities and environment)** Measurement of temperature (15-20°C) and relative humidity (75-90%). Check biosecurity systems
- CP2 (feed and water)** The feed should be dry and absent from fungal proliferation. The water used in the farm should be potable
- CP3 (snails)** Inspection of the animals paying special attention to possible pathologies. Died animals should be removed daily
- CP4 (data records)** All farms must have a system for recording sanitary hygienic conditions
- CP5 (laying)** Eggs must have white and turgid appearance. Grey and yellow colourings together with weak consistency are indicators of the presence of fungi
- CP6 (movements)** Control movements of animals by recording farm entries and exits. It is specially important in reproduction stage
- CP7 (plant cover)** Good maintenance of plants where animals are raised is essential to keep the conditions they need

CONCLUSIONS

- Heliciculture is an **emergent** animal production
- *H. aspersa* is the main choice for rearing snails under controlled conditions (usually **intensive** systems)
- **Meat** is the main product obtained from snail rearing
- There are several main **control points** that ensure the proper operation of snail farms