Organic farming & old varieties in Europe

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Organic farming in Europe

- The organic sector in the EU has been rapidly developing during the past years.
- According to Eurostat data, the EU-27 had in **2011** a total area of **9.6 million hectares** cultivated as organic, up from **5.7 million in 2002**. In **2012- 11.2 million hectares.**
- Although this is a big increase, the whole organic area represents only 5.4% of total utilised agricultural area in Europe. The organic area is cultivated by more than 186 000 farms across Europe

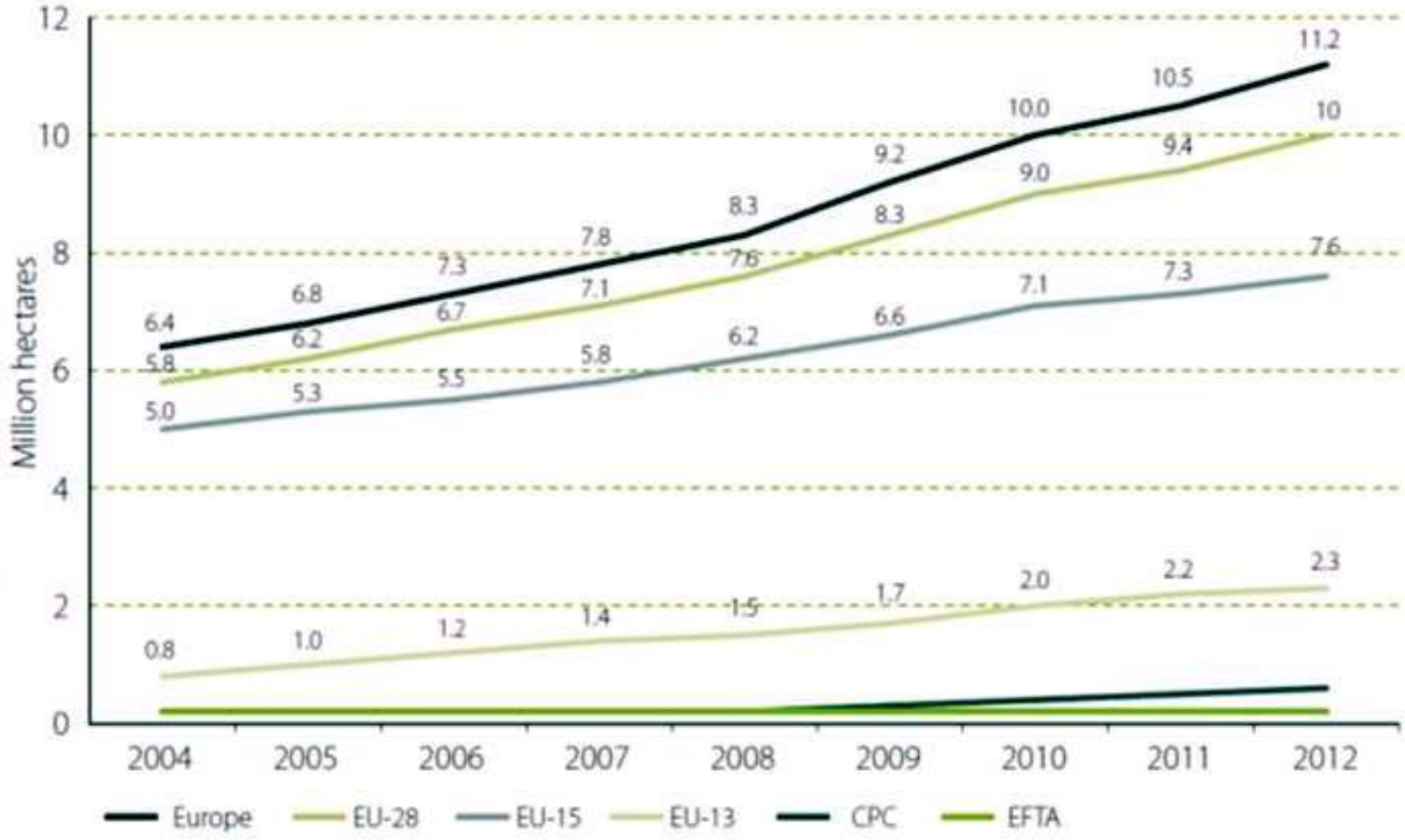


Figure 5.4: Growth of organic agricultural land, 2004-2012

Source: OrganicDataNetwork survey 2013 based on national data sources and FiBL-AMI-IAMB survey 2013, based on Eurostat and national data sources

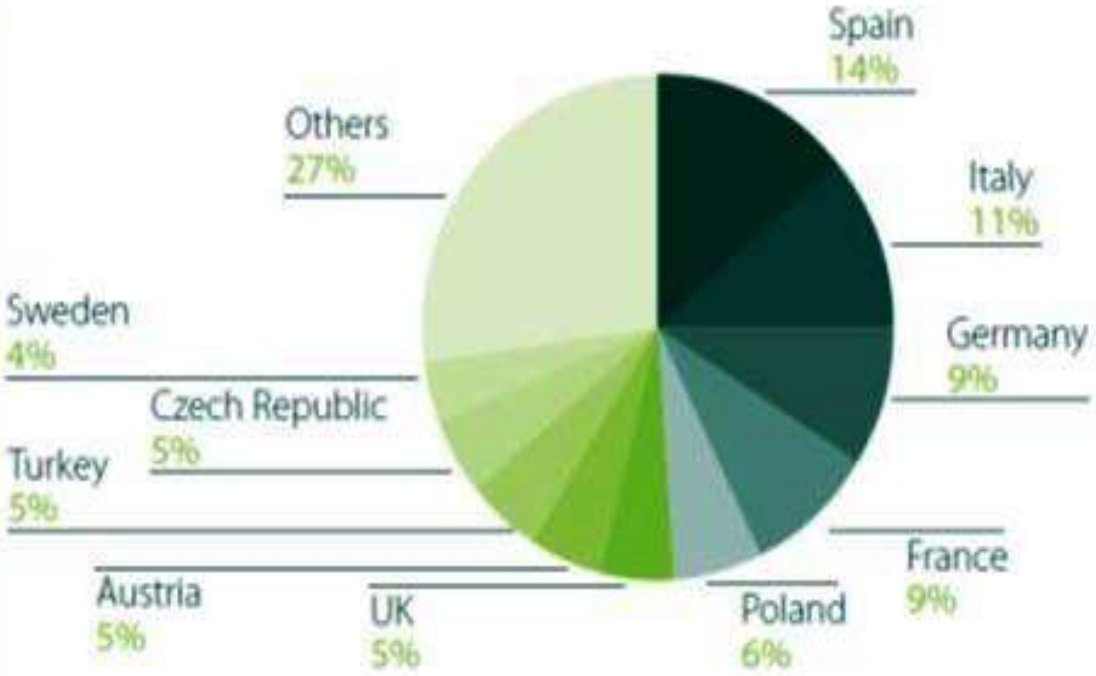


Figure 5.1: Distribution of organic agricultural in Europe, 2012 (11.2 million hectares)

Source: OrganicDataNetwork survey 2013 based on national data sources and FiBL-AMI-IAMB survey 2013, based on Eurostat and national data sources

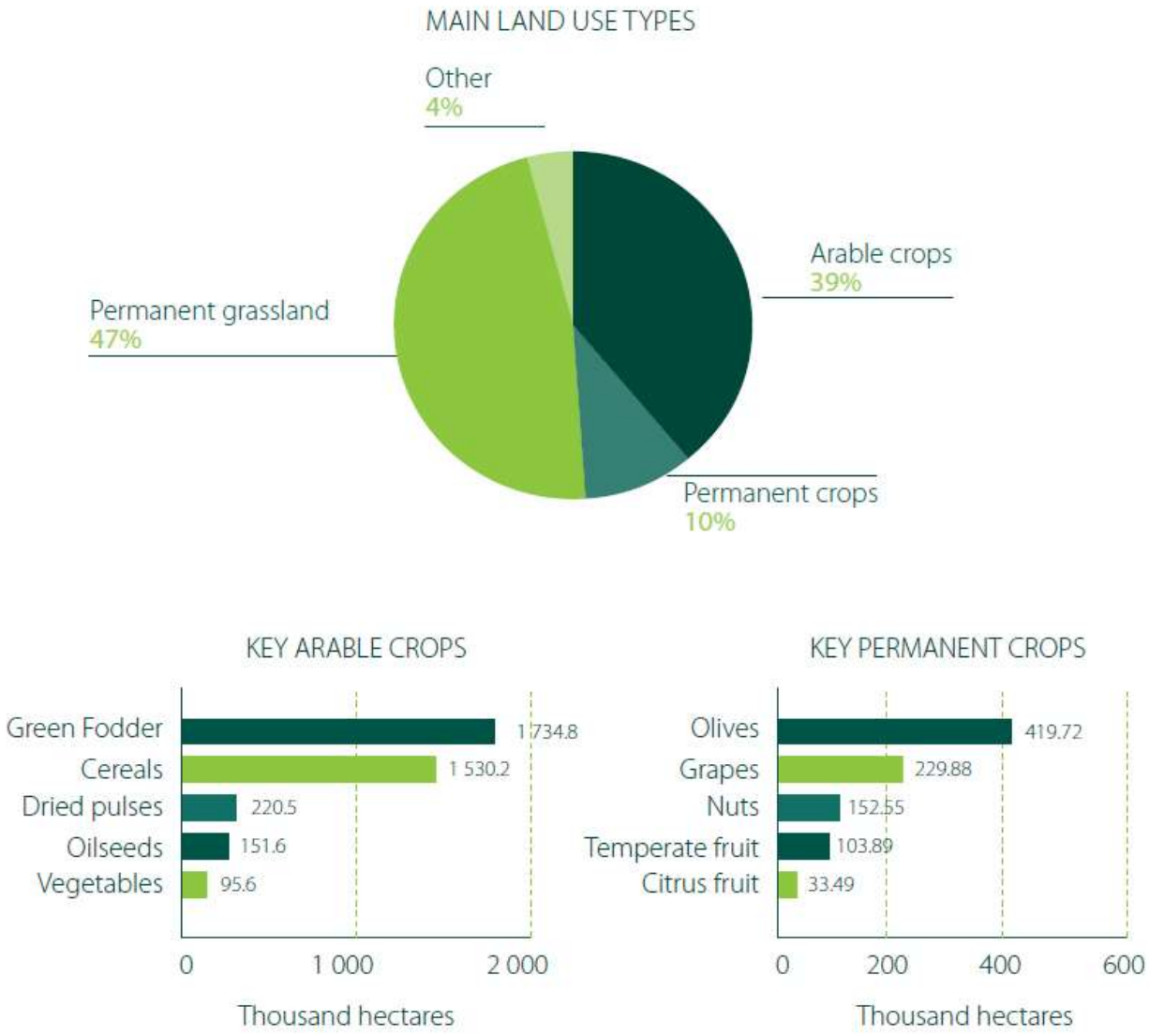


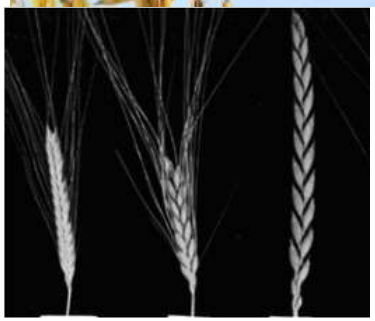
Figure 5.6: Organic agricultural land use in the EU-28, 2012

OrganicDataNetwork survey 2013, based on national data sources and FiBL-AMI-IAMB survey 2013, based on Eurostat and national data sources

Sustainable intensification through diversity

✓ **In-crop diversity**:

- The use of „old”/ „traditional” varieties of crops:
  - Old varieties of vegetables, and fruits
  - Old varieties of cereals



✓ **Between-crop diversity:**

- The use of orphan crops, future crops, **underutilized**/neglected plant species, forgotten crops or traditional crops

✓ **Underutilized crops in Europe:**

- **Hulled wheats**

1 Einkorn (*Triticum monococcum* L.)
2 Emmer (*Triticum dicoccon* Schrank (Schuebl.)
3 Spelt wheat (*Triticum spelta* L.)

- **Oat**

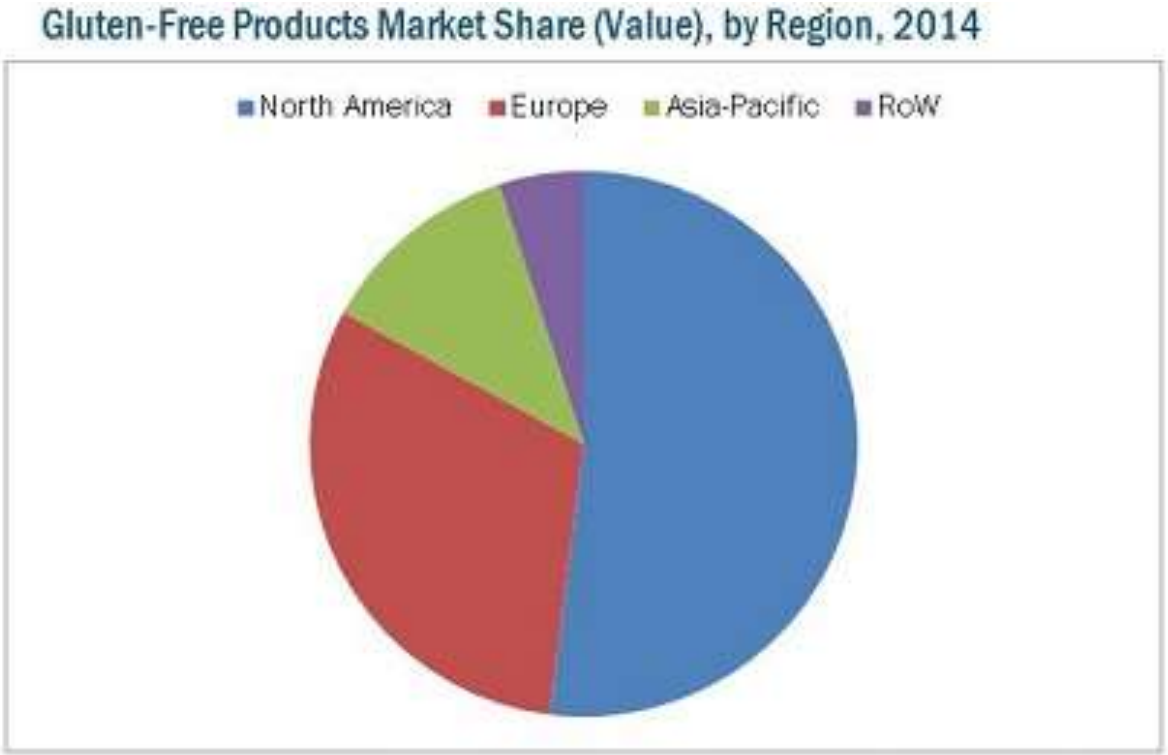
1. Naked oat (*Avena nuda* L.)

- Sorghum and millets

1. Sorghum (*Sorghum bicolor* (L.) Moench)
2. Common millet (*Panicum miliaceum* L.)

Sustainable intensification: challenges for R&I actions

- Enhancing agro-biodiversity and maximizing the yield potential of organic farming: Long-term breeding programmes for locally adapted plant varieties of crops suitable for organic/sustainable farming
- Developing various strategies of weeds, diseases and pests management for organic and near-organic farming; research aimed at „basic substances" (e.g sorghum water extract as bioherbicide)
- The use of old varieties of crops as sources of in-crop diversity
- Broadening the diversity of crops cultivated in Europe by the use of crops widely cultivated in Africa: cassava (*Manihot esculenta* Crantz), millet (*Panicum milliaceum*), amaranth (*Amaranthus* L.), teff (*Eragrostis* tef). All these crops can be used as sources of gluten-free food



Source: Expert Interviews, Government Authorities, Related Associations/Institutes, Related Research Publications, Government Publications, and MarketsandMarkets Analysis

- Increasing concerns for celiac disease and gluten intolerance is driving up the demand for GF products in Europe witnessing a tremendous growth in a year span of 2011-12.

It is expected that European market for GF products will see tremendous growth in the near future with Germany leading the pack.

Source: marketsandmarkets.com