

# Sustainable Trentino.

## Future becomes the present.

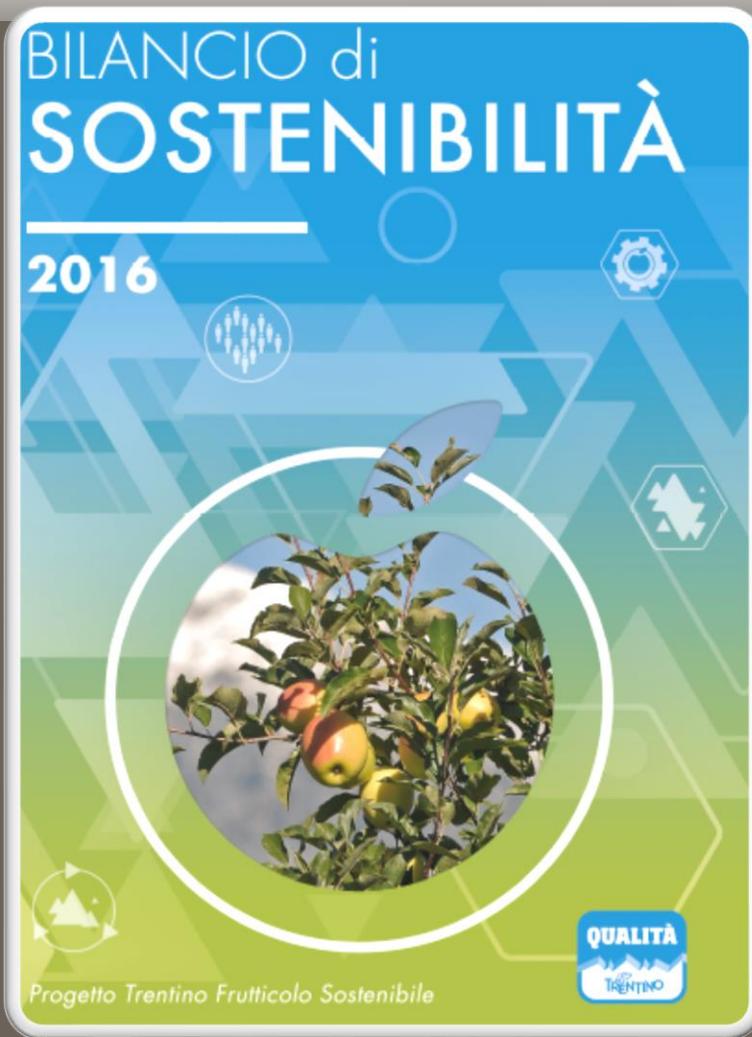


**APOT**  
ASSOCIAZIONE PRODUTTORI  
ORTOFRUTTICOLI TRENINI

# Concentric circles model of sustainability.



# Why a report of sustainability ?



<http://trentinofrutticolosostenibile.it>

## What is it inside?

Significant elements about Trentino fruit system, based on priorities identified by stakeholders and shareholders.

Sustainable Trentino fruit system



# Society and local economy



# The Trentino fruit cooperation system

**7.764**

**Number of associated growers**

**1.500**

**Employees of cooperatives**

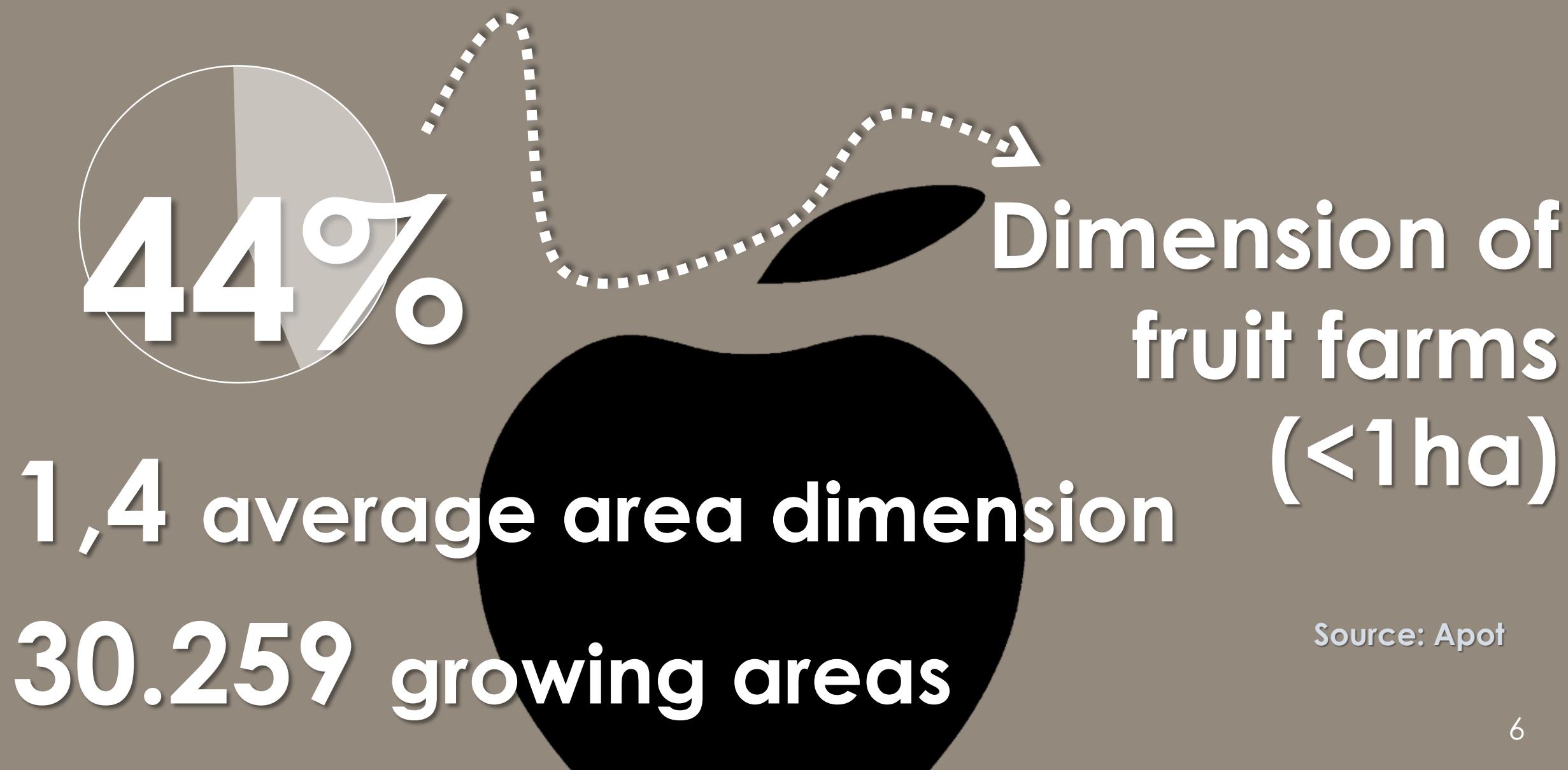


**363 mln**

**The value of marketed production (VMP)**

Sources: Apot,  
Assomela,  
Cooperazione  
trentina

# Trentino fruit farms' structure



# Environment



Sustainable Trentino fruit system



Society



Economy

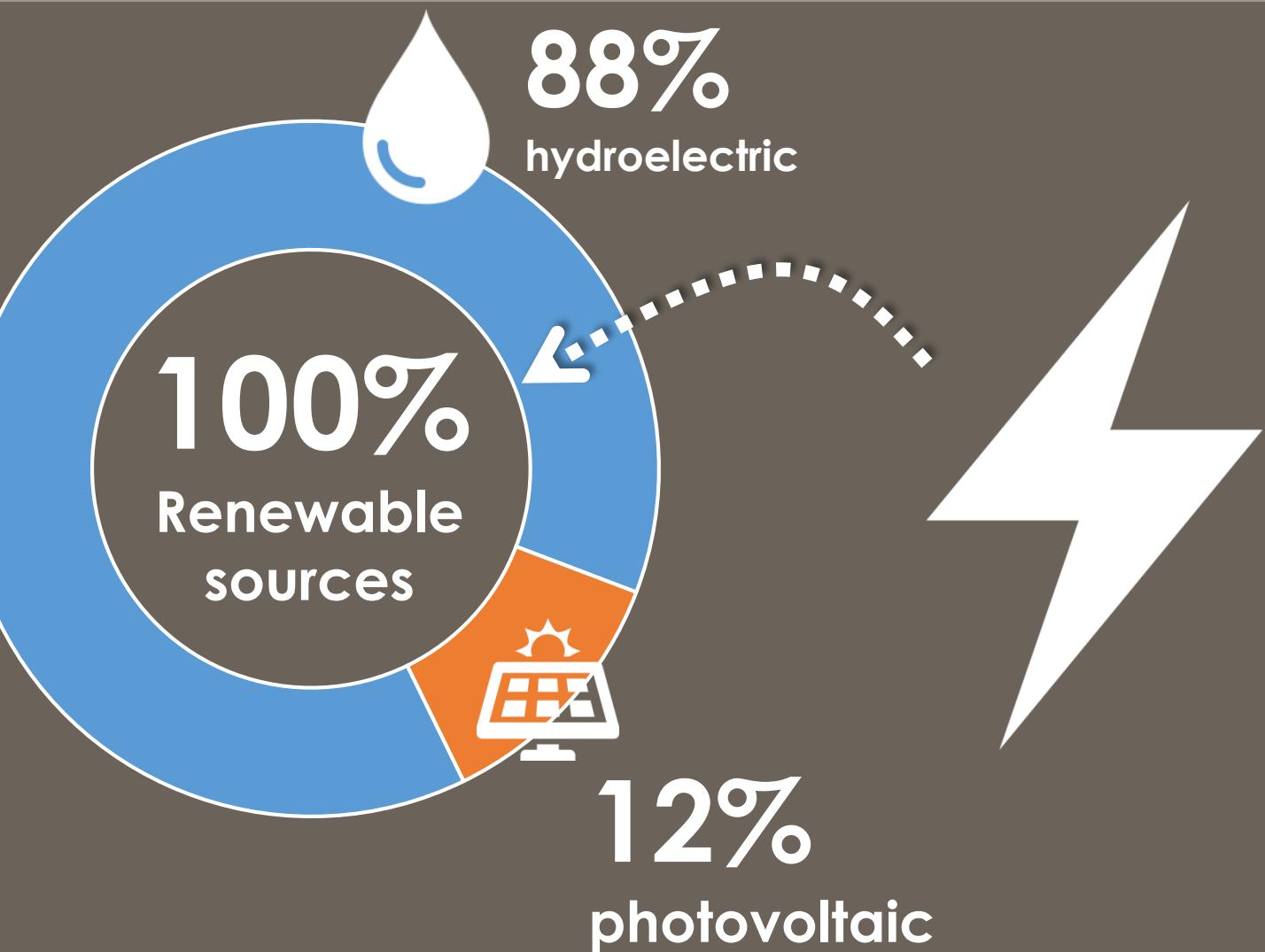


Environment

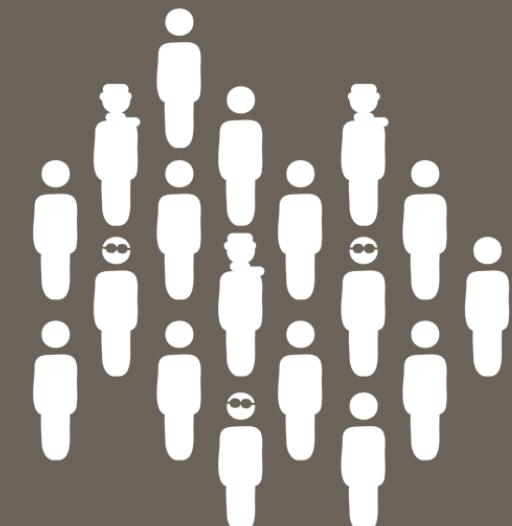
# Life cycle of 1 Kg of apples from Trentino: CO<sub>2</sub> emission



# Sources of energy for Trentino apples production



Use of electric  
energy by  
7.000  
people in  
Trentino in  
1 year



# A natural fridge: Melinda hypogaeum cells

53%

Annual saving energy

Compared to traditional cells and for ten years of use

Sustainable Trentino fruit system



Society



Economy



Environment

Electric energy use  
by  
2.000 people  
living in  
Trentino  
in a year

# Water saving: irrigation



2000

Mainly  
Over-tree

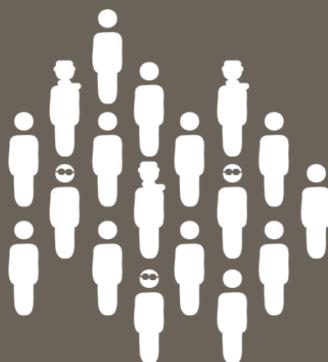
2016

Mainly  
Drop irrigation

30,6%

ANNUAL WATER SAVING

Water use of  
**167.000**  
**people**  
per year



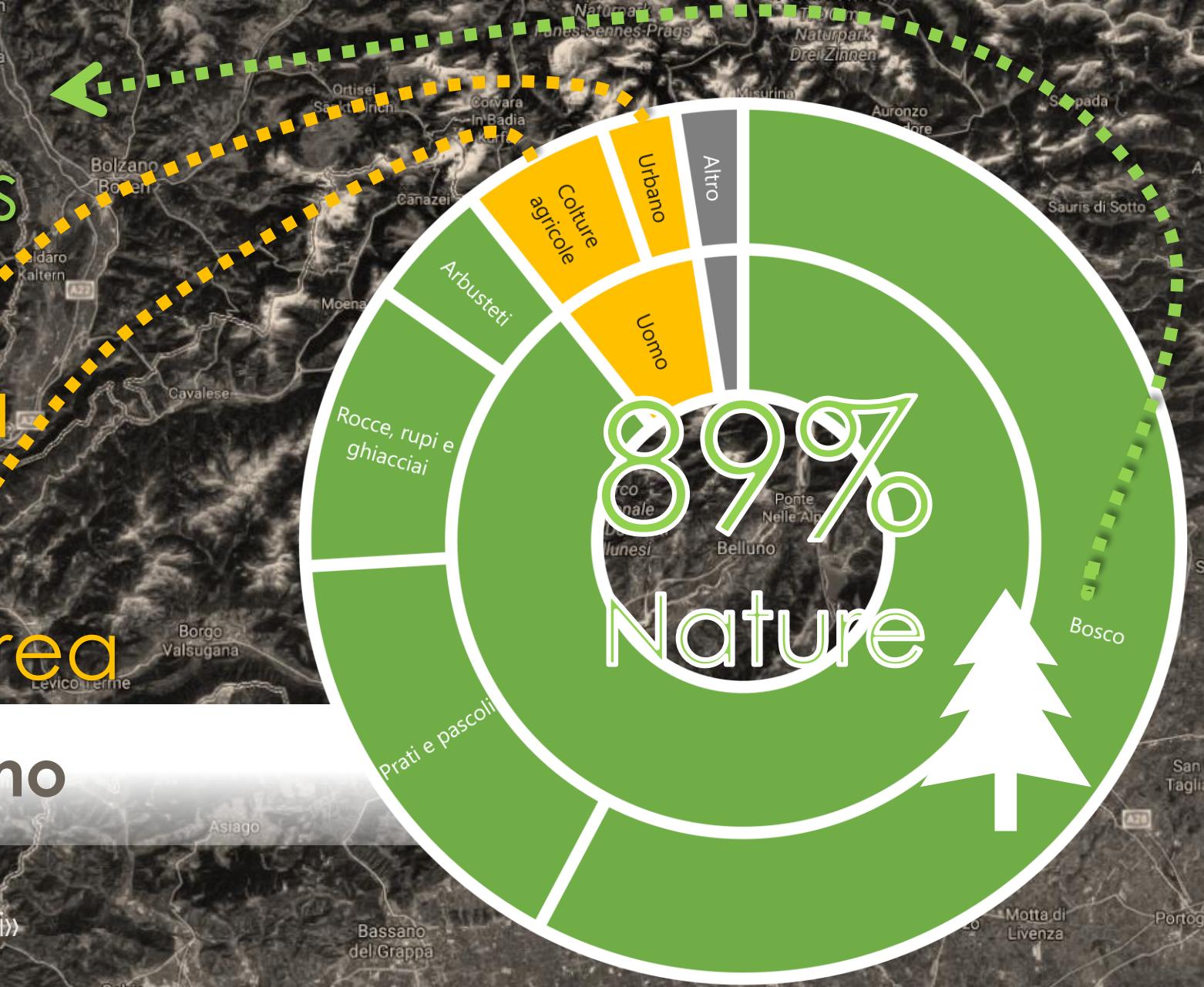
57,8%  
Woods

2,8%  
Urban area

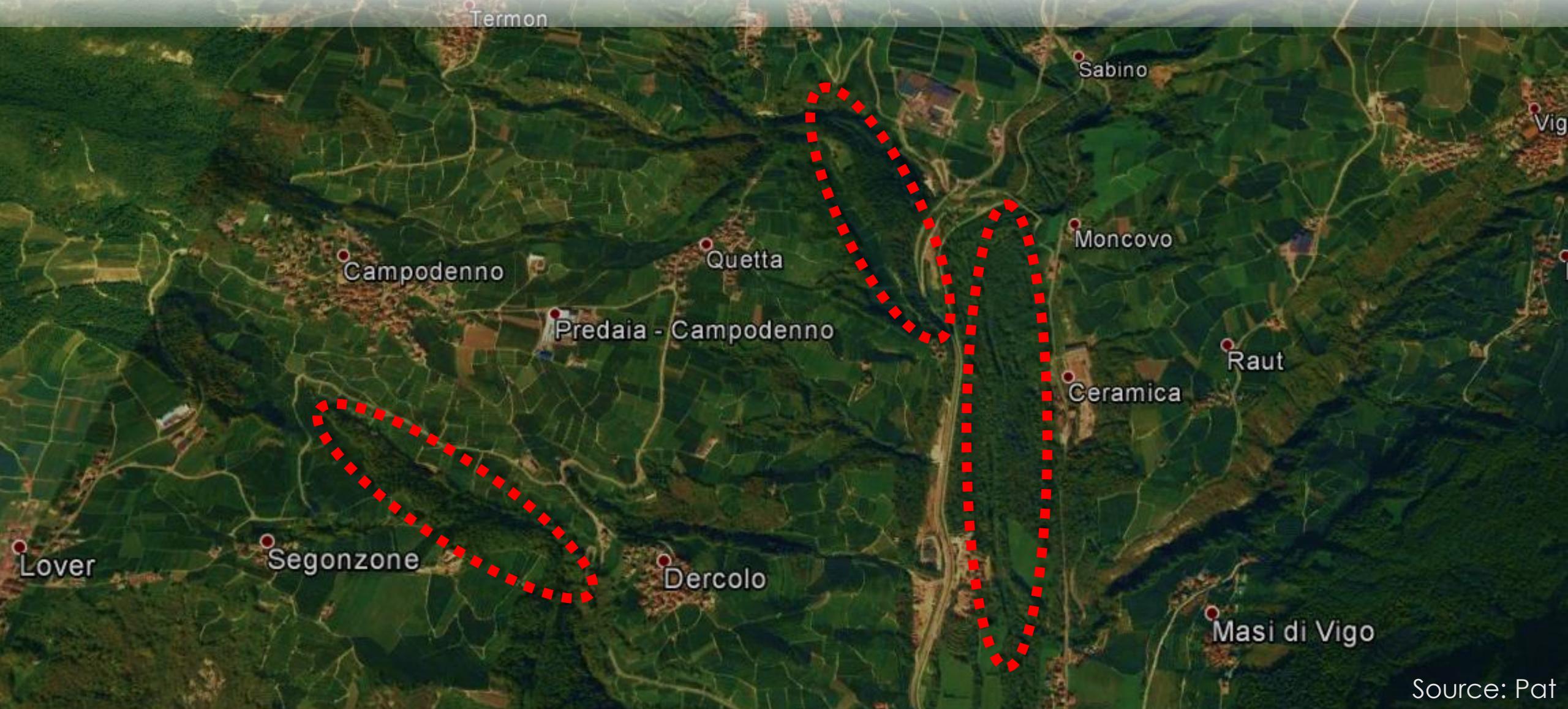
5,4%  
Cultivated area

## Territory of Trentino

Source:  
2004 «Trentino verso nuovi paesaggi»  
Pat-Unitn 2013



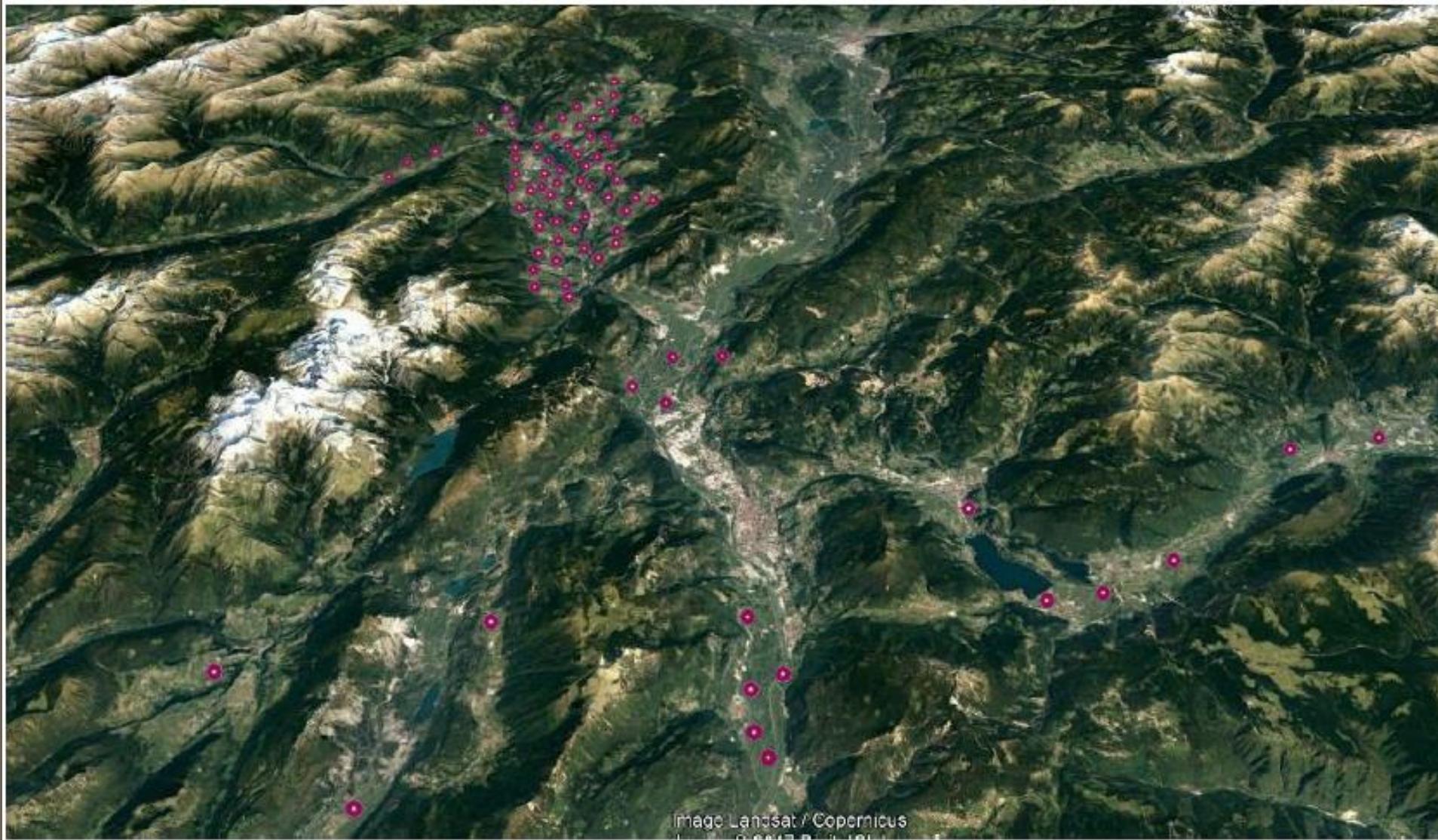
# Endangered woods? The Val di Non case



Source: Pat



# Soil Biodiversity certification



# Soil Biodiversity certification



# The water quality and a sustainable future

Limited use of clorpirifos ethyl and water quality

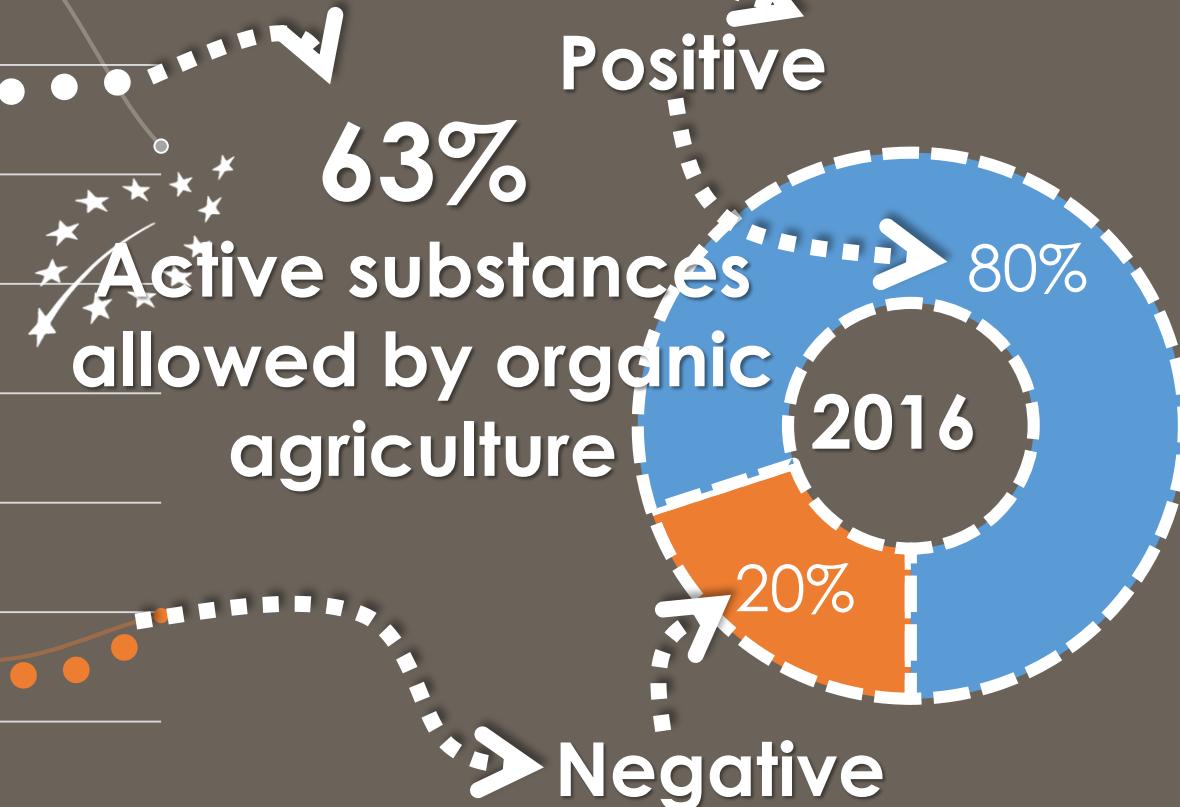
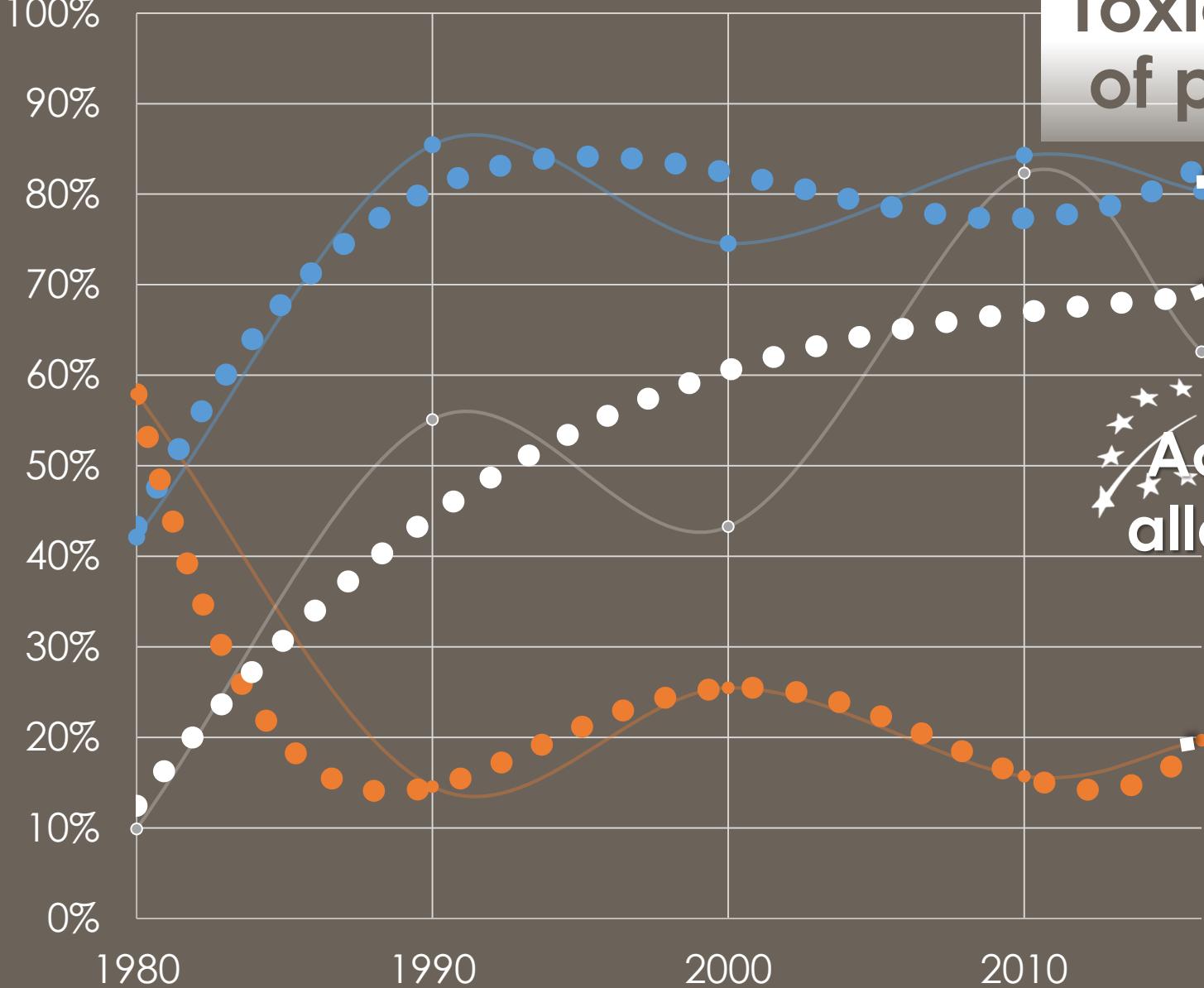
Nel 2016: 2.600 ha no treated area

Nel 2017: 4.500 ha no treated area

Nel 2018: stop using  
Clorpirifos ethyl



# Toxicology profile's evolution of plant protection products



# Agronomic techniques

Active substances

100%

Integrated pest management + Organic management

63%

PPP  
allowed

New projects soon

# Some actions for the future



GALANT  
80 ha



Resistant varieties programme



50 ha  
OPAL



Sustainable Trentino fruit system



Society

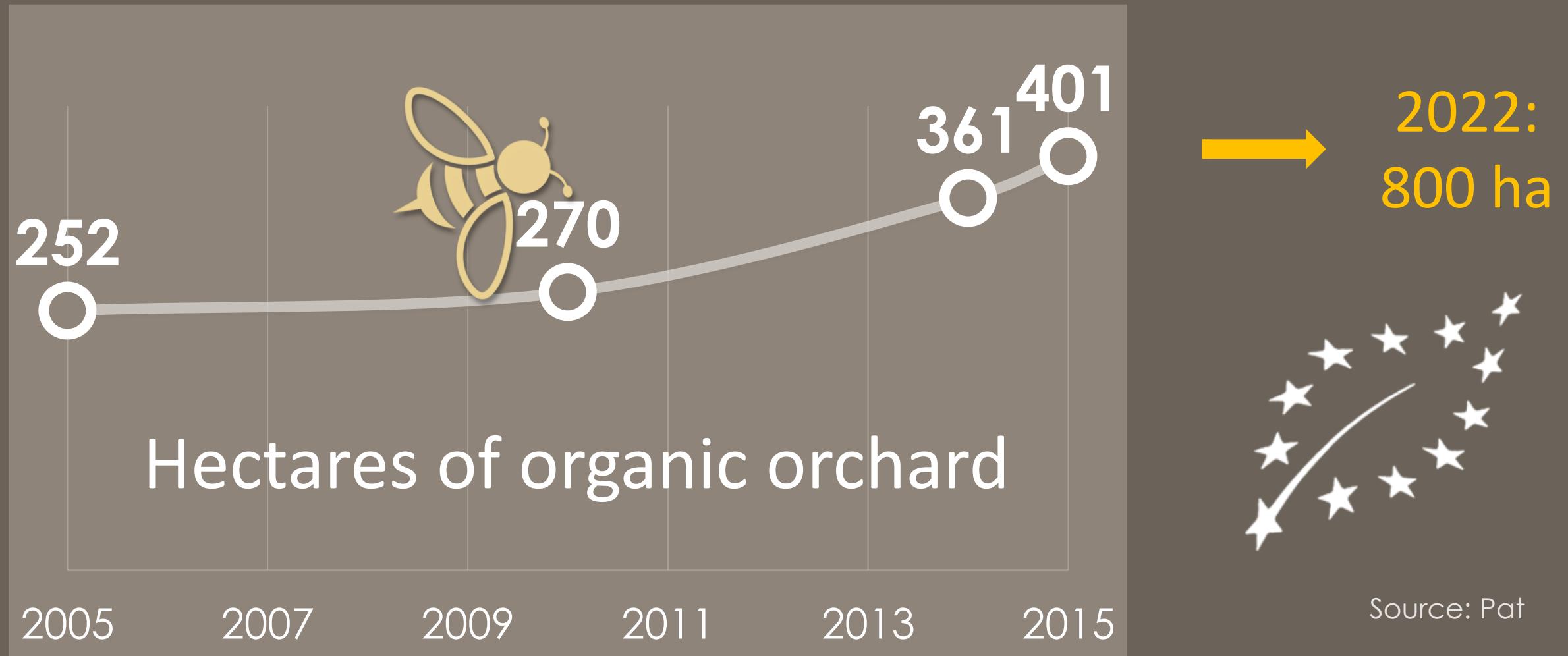


Economy

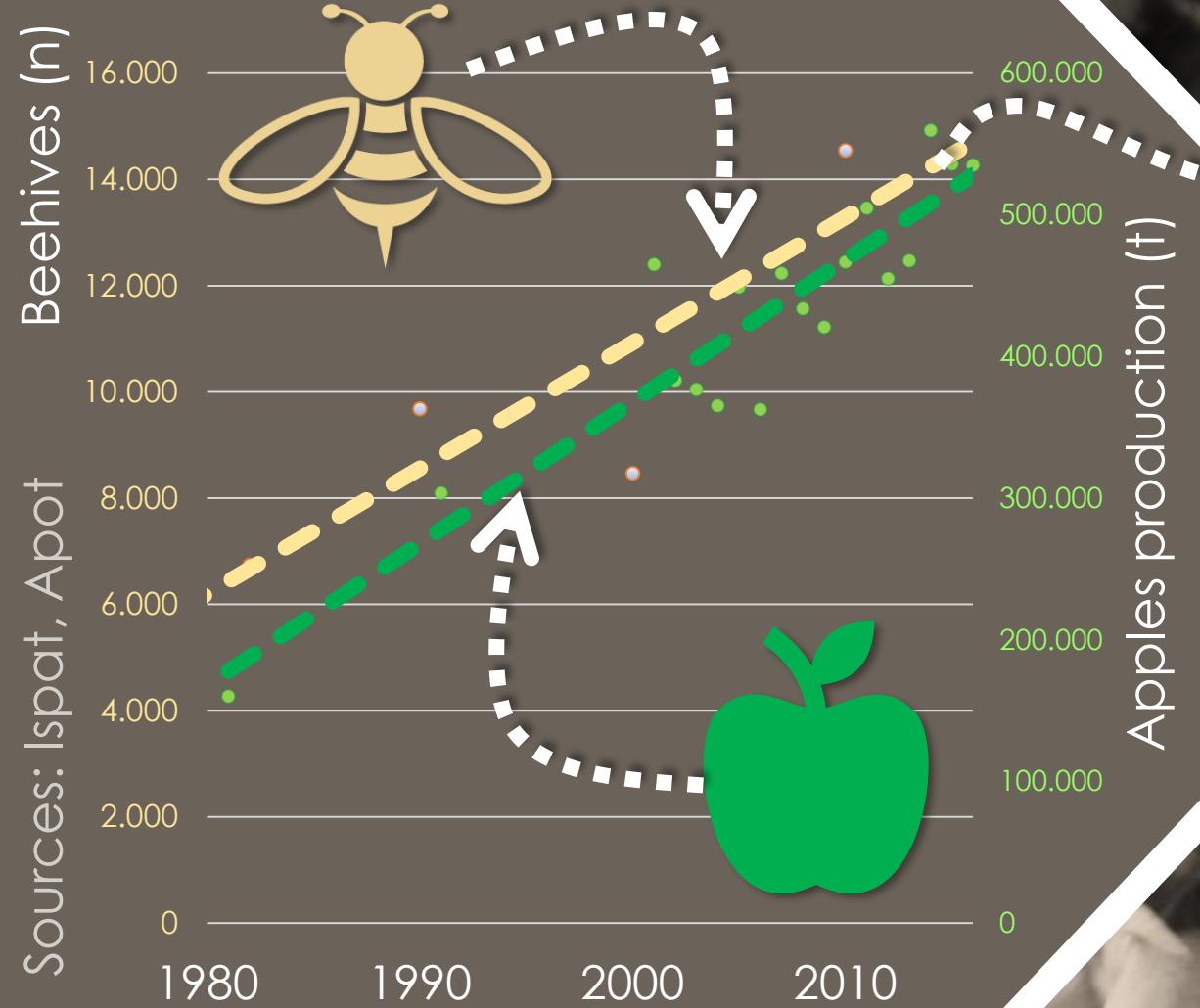


Environment

# Organic agriculture and new projects



# In Trentino



Sustainable Trentino fruit system



Society



Economy



Environment

# Beehives and apple orchards

## Growing together

«Studies about some species of birds of prey in agricultural environment have showed positive habitat-species relations.»



Eagle-owl



Long-eared owl



Common buzzard



Peregrin falcon

Source: Museo Trentino di Scienze Naturali



Kind concession from mr. Mauro Mendini

Sustainable Trentino fruit system



Society



Economy



Environment

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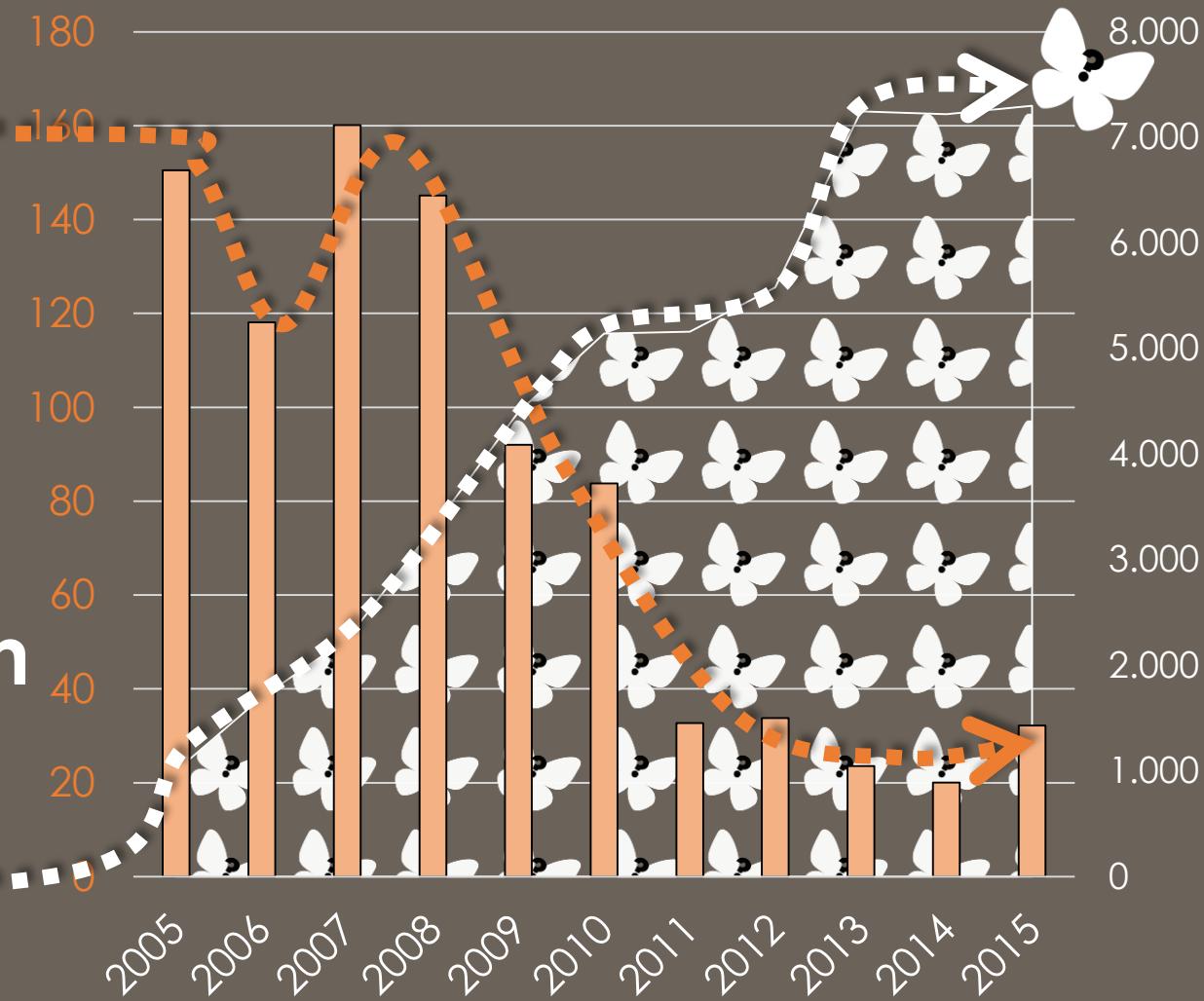
# Sexual confusion techniques to reduce pesticides use



Source: Apot

Pesticides positive  
Samples (%)

Sexual confusion  
spread (ha)



# Integrated pest management guidelines

## 2016 controls

1. Right use of plants protection products .
2. Right use of products against weeds.
3. Right use of sexual confusion technique.
4. Right uproot of symptomathic plants
5. Right air-spray setting
6. Right washing of equipment



# Checks on residues on apples in the last 14 years.

13.769 samples  
Looking for  
2.269.434 active substances



0,57%  
non compliance  
9 times  
more of  
certifications  
requirements

# Investing in the future: special projects

For projects for  
the improvement  
of sustainability

More than  
200.000€  
a year

Project «Sustainable  
pedestrian apple  
orchard »

Project  
«Apple & Berry»

Improvement of  
water use efficiency



# Investing in the future: continuing services

For services for  
the improvement  
of sustainability

More than  
**950.000 €**

for

Certifications, health  
and safety in work  
places

Integrated and organic  
agriculture

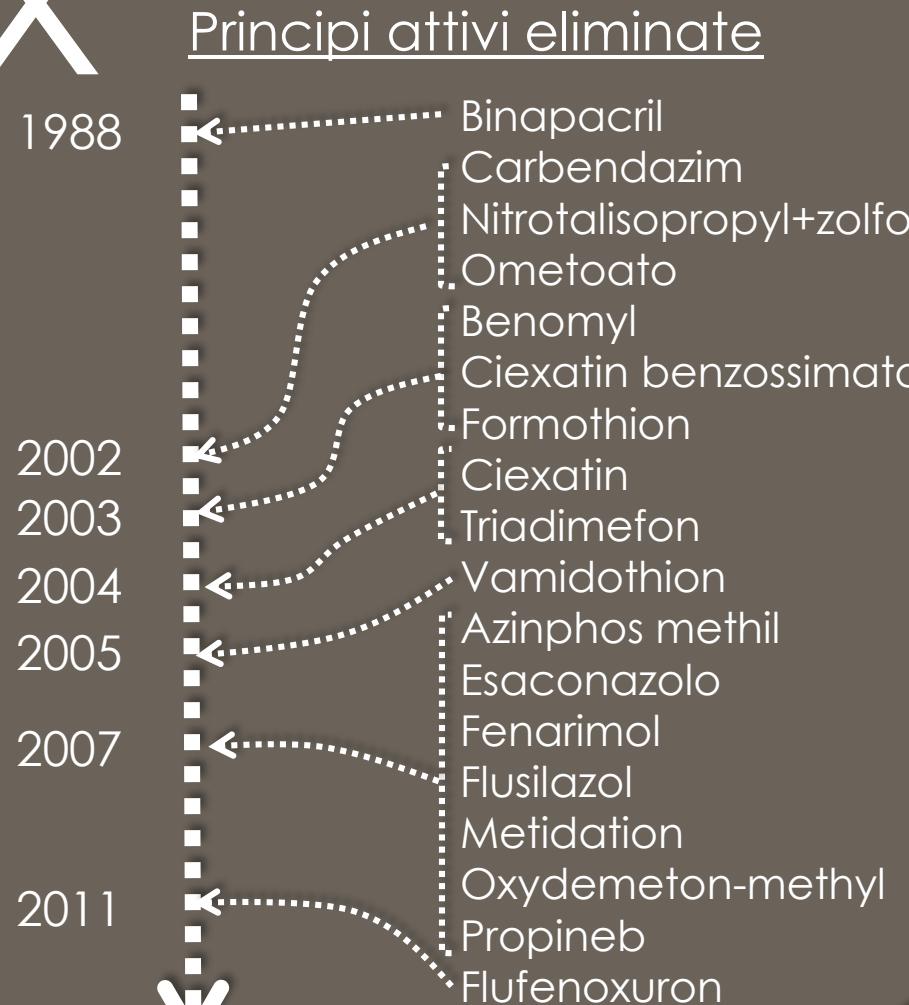
Sustainable orchard  
and bees  
management

Techical advice



# The way to follow in our opinion

X



This way will proceed  
in the future

Keeping in mind the big  
number of variables



Thank you for your  
attention

