



MILJAN CVETKOVIĆ

in cooperation with

GORDANA ĐURIĆ AND PAKEZA DRKENDA

# FRUIT PRODUCTION SECTOR IN BOSNIA AND HERZEGOVINA

COUNTRY REPORT

# SARAJEVO



BANJA LUKA





University in Banja Luka



Pome and Stone fruits

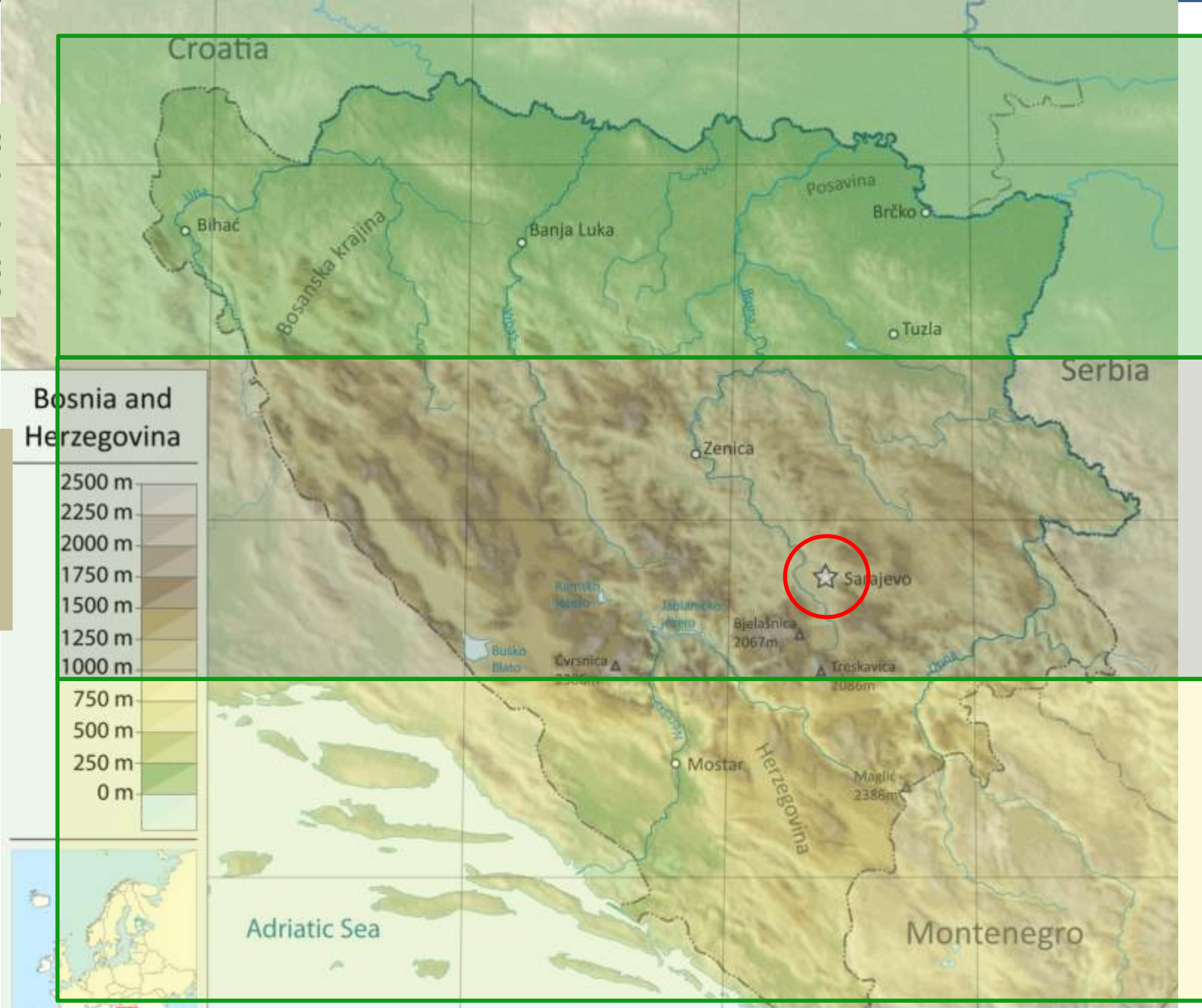
Continental

Small fruits

Continental - mountain

Grapes, olives

Mediterranean



Total coverage **51,209.2 km<sup>2</sup>** (Land **51,197 km<sup>2</sup>**: Sea **12.2 km<sup>2</sup>**)



# Fruit production in Bosnia and Herzegovina





According to data from the 2015 about **147,000** people were employed in agriculture, **65%** men and **35%** women.





The share of agriculture in total employment in 2015 was about 17.9% (official data?).







The total number of bearing trees of different fruit crops in 2015 was **24.51 million**



# The state of the art of fruit production in B&H - general remarks -

- ✎ Fruit production is concentrated in the mountainous regions, while the more fertile lands reserved for open field crops and vegetable crops
- ✎ Orchards are located on land with not so well production characteristics (fertility, pH, physical structure ...)
- ✎ Lack of capital investments in fruit production (irrigation, anti-hail nets, cold storage capacity...)
- ✎ Poor organization of producers
- ✎ Undefined marketing strategy
- ✎ ...

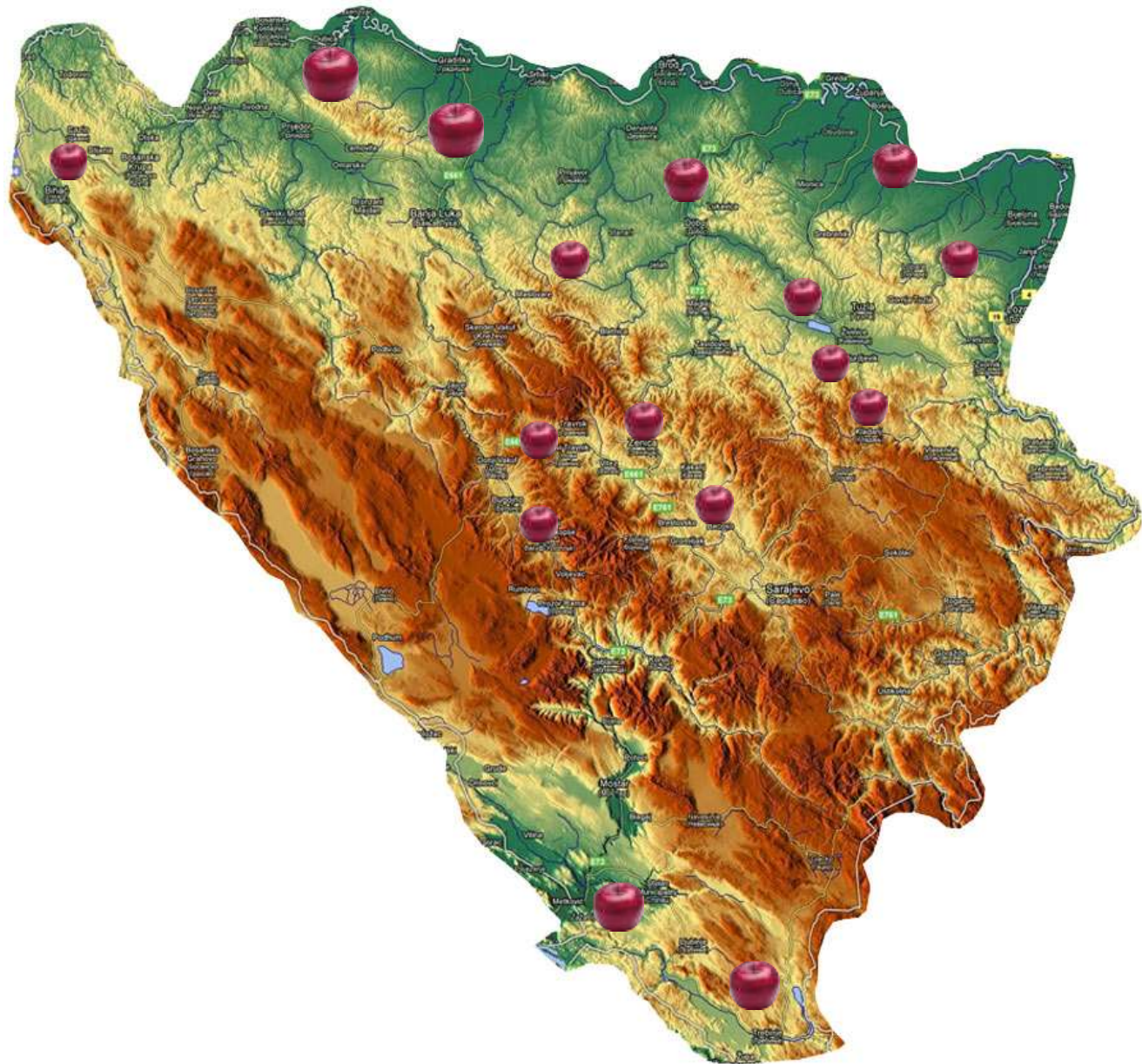


# Fruit production in B&H

## What we grow?

APPLE







**GOOD SIDE:** EXPERIENCE, ENVIRONMENTAL CONDITIONS, ORCHARD MANAGEMENT IS RELATIVELY GOOD...



**GOOD SIDE: QUALITY, INVOLVEMENT OF YOUNG PEOPLE IN THE PRODUCTION, THE EXISTENCE OF CERTAIN SALES CHANNELS**



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**PROBLEMS: UNFAVORABLE ASSORTMENT, LOW INVESTMENTS IN IRRIGATION AND ANTI-HAIL SYSTEMS, THE LACK OF MEDIUM-SIZE PRODUCERS (10-15H) ...**

**PROBLEMS:** NOT ENOUGH HIGH QUALITY STORAGE CAPACITY, POOR ORGANIZATION OF FARMERS, POOR ORGANIZATION OF MARKETING...





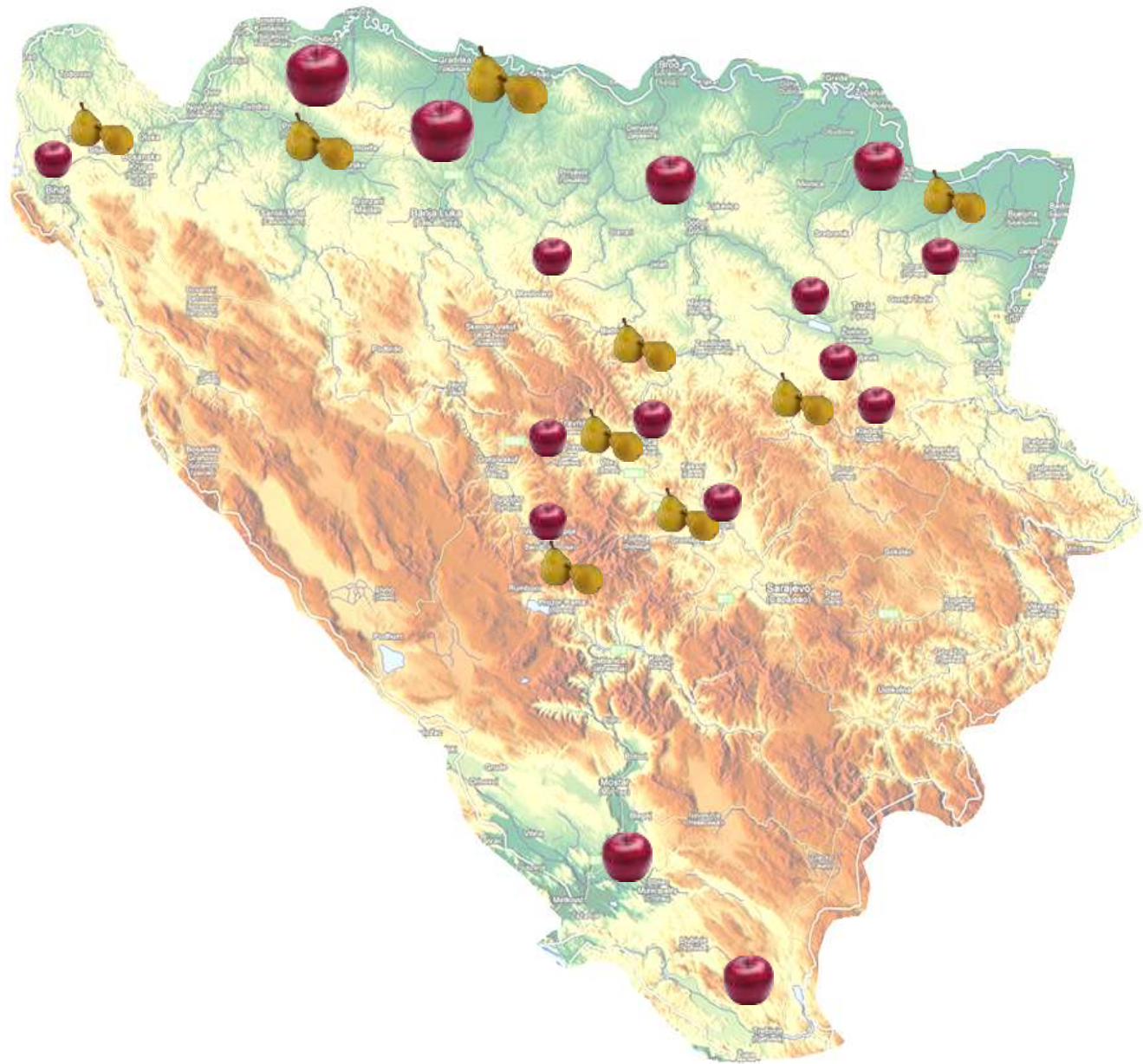
# Fruit production in B&H

## What we grow?

APPLE

PEAR







**GOOD SIDE: QUALITY, LACK OF PEARS ON THE MARKET, GOOD ENVIRONMENTAL CONDITIONS FOR GROWING, PROCESSING ABILITY (WILLIAMS)...**





**PROBLEMS: ASSORTMENT, ROOTSTOCKS, DISEASES (ERWINIA AMYLOVORA, PSYLLA PYRI), LACK OF IRRIGATION SYSTEM AND ANTI-HAIL NETS, PROBLEMS IN THE GROWING TECHNOLOGY...**



# Fruit production in B&H

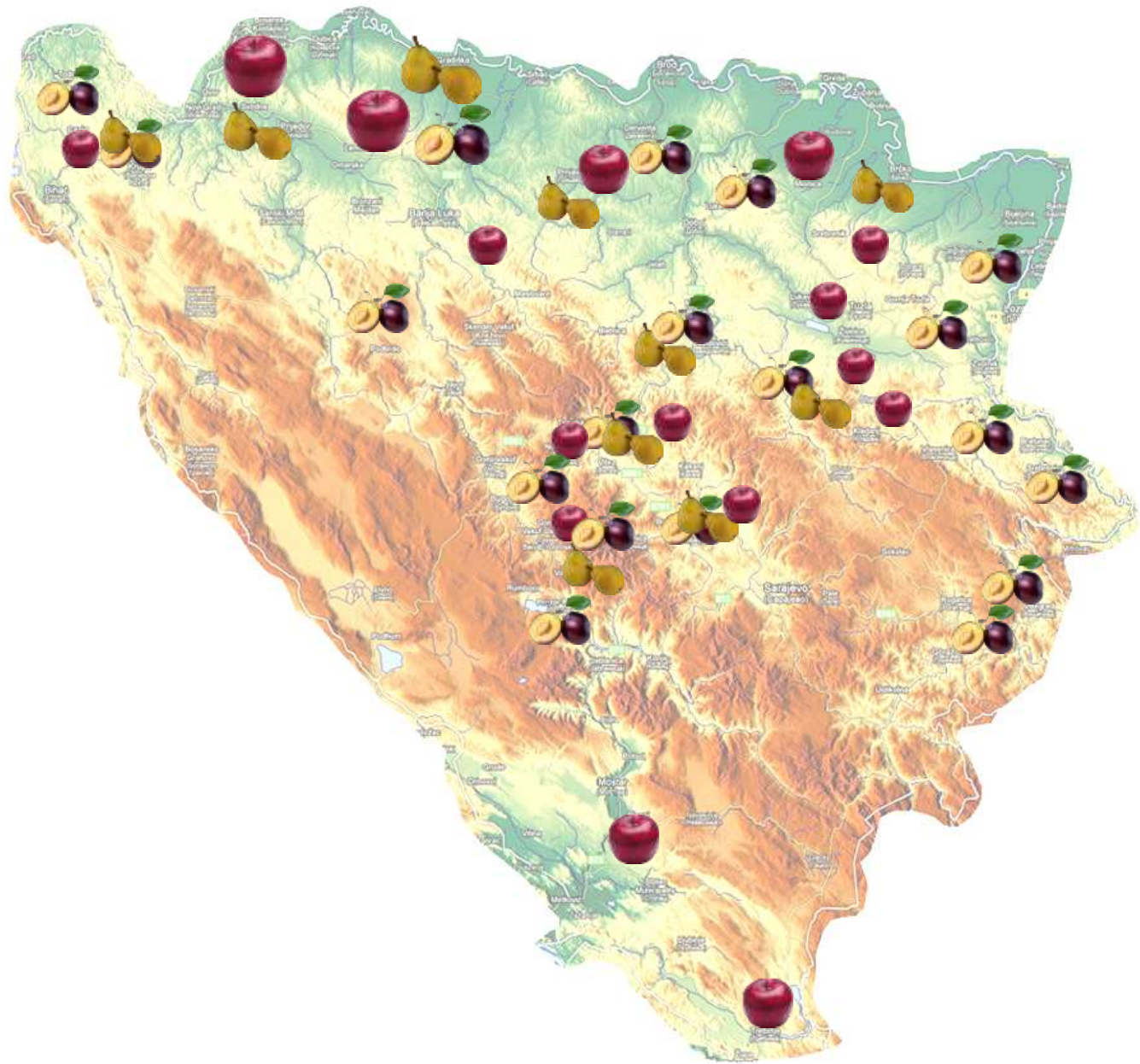
## What we grow?

APPLE

PEAR

PLUM – PRUNUS DOMESTICA (EUROPEAN PLUM)





**GOOD SIDE: EASIER TO GROW, GOOD TECHNOLOGY, HIGH QUALITY, THE POSSIBILITY OF PROCESSING ...**



**PROBLEMS: ASSORTMENT, ROOTSTOCKS, LACK OF IRRIGATION AND ANTI-HAIL NETS, THE TREND DECLINE IN PRODUCTION**





PROBLEM: HIGH QUANTITY (BUT ALSO HIGH QUALITY) HOME PRODUCTION OF ALCOHOL - RAKIJA - ŠLJIVOVICA

There are not standardization in production!



ANY GATHERING IS IMPOSSIBLE WITHOUT BRANDY (BIRTHDAY, WEDDING, FUNERAL...)...





...SOMETIMES WENT IN THE WRONG DIRECTION!



# RAKIJA

Connecting People



# Fruit production in B&H

What we grow?

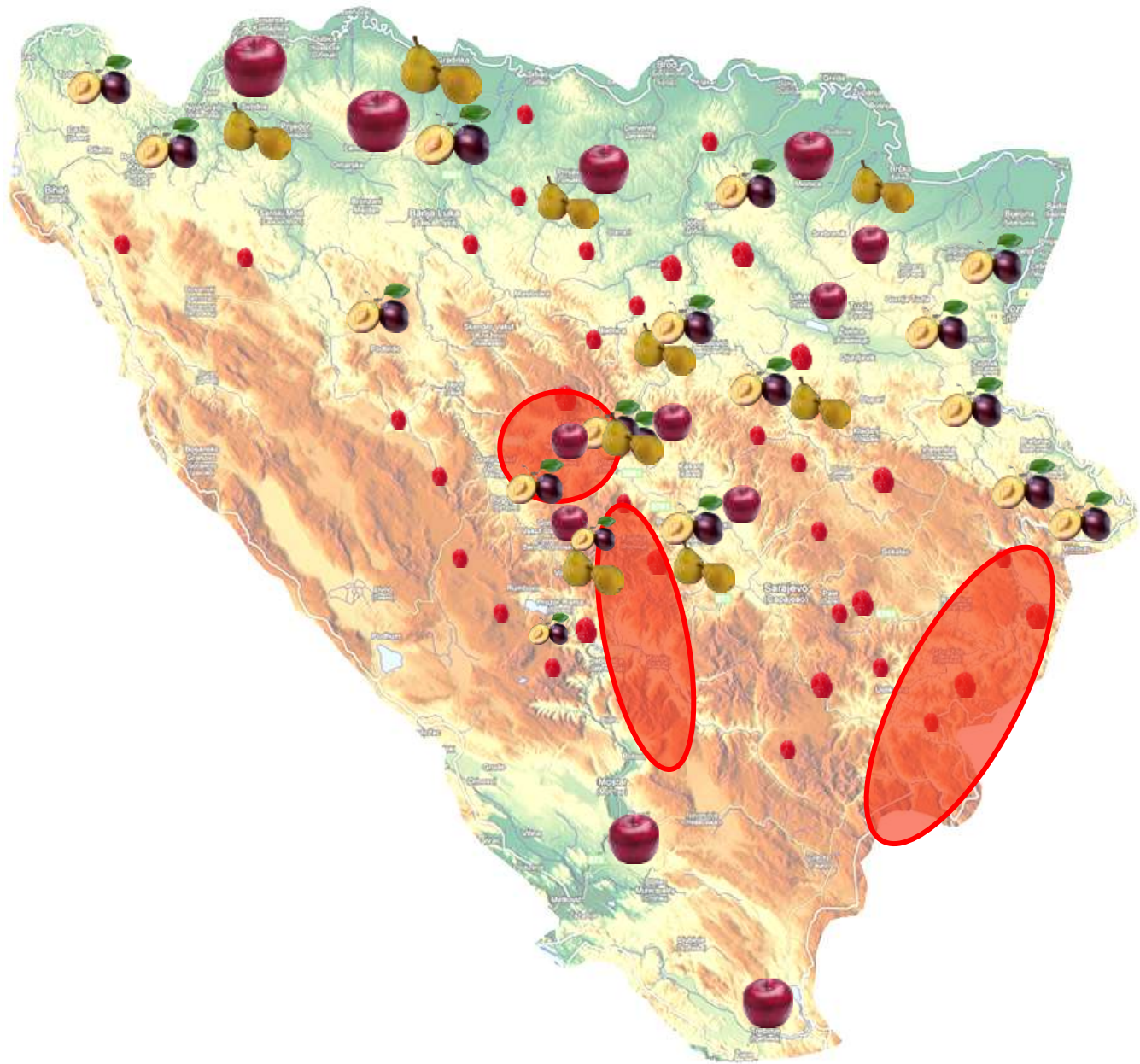
APPLE

PEAR

PLUM – PRUNUS DOMESTICA (EUROPEAN PLUM)

SMAL FRUITS = RASPBERRY

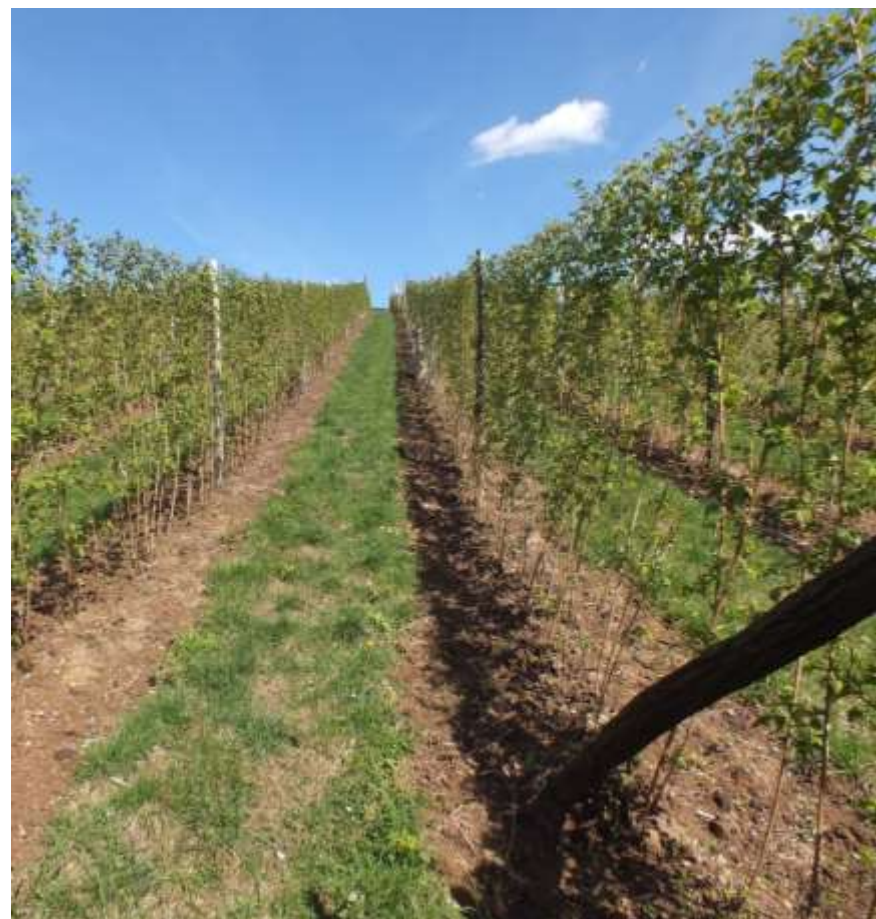




The berry fruit sub-sector is wholly oriented towards export markets and accounts for almost **50%** of the total fruit and vegetable exports of BH.



- In Bosnia-Herzegovina, raspberries are grown on **1,682 ha** of land, with a total production volume of **13.631t**, ranking fourth among fruit crops.



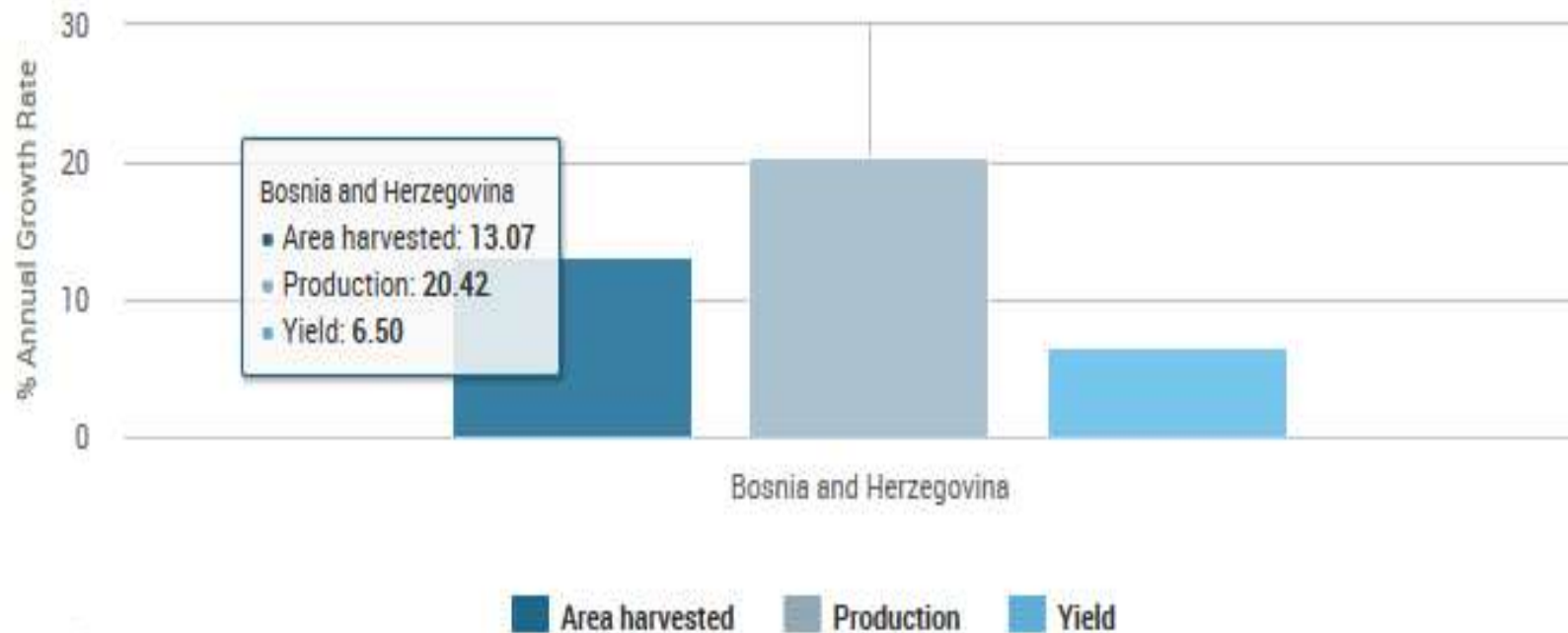
Primary raspberry production increased from **916 ha** in 2006 to **1,682 ha** in 2015, enjoying the leading position in the country's total fruit exports, accounting for about **13 thousand tonnes** worth **BAM 51 million (\$ 28 million)**.





According to FAO data, raspberry production in Bosnia and Herzegovina during 2003-2013 showed annual growth in **harvested area (13.07%)**, **average yield (6.50%)** and **total production (20.42%)**.

Annual growth rates by selected country 2003 - 2013



M = Million, k = Thousand

*Growth rate calculated based on the Least-Squares method*

Average yields are about 8.5t/ha.



Raspberries are typically produced on small-size farms ranging in area from **0.1 to 0.3ha** on average.





## Planting material is of local origin



Although part of the planting material is being imported (Poland, England), there has been a steady increase in the number of locally registered nurseries.



Floricane fruiting cultivars predominate, but there has been a marked tendency to increase land area under primocane fruiting cultivars.



- In commercial production, 'Willamette' is the most important cultivar, followed by 'Meeker' and, occasionally, 'Tulameen'.



Among primocane fruiting raspberries, 'Polka' is the dominant cultivar, although 'Heritage' and 'Polana' are also used in some plantings.





The production technology used as the **trellis system** in florricane cultivars and the **hedgerow system** in primocane cultivars has been at a satisfactory level and in accordance with cultivar specificity.



Primocane cultivars are also grown under rain cover, but to a small extent.









