Apple and berry farming in Finland; current status, latest news and product development.

- Paula Achrén



### About myself

- Paula Achrén, 37 years
- www.paulanpuutarha.fi
- ▶ IT Engineer / Apple farmer in 3rd generation
- Family; husband and 3 children

Apples: 8,5ha

Rhubarb: 0,5ha





### How did it got started...

- > IT engineer since 2004
- Worked at Elcoteq Design Center 2005
- > Started at Nokia 2006
- Decision about taking over the apple farm in Feb 2007
- > Studying farming (120ov) at Tuorla
- Moved to farm 2009
- Quit working at Microsoft 2015



#### History of our farm

- > Starting from 1965: strawberries, cucumbers, dill, carrots, apples...
- All production buildings from 1970
- After year 2000 renovating and concentrating only on apples and rhubarb.
- After 2007 new machinery
- > 2016 built 500m2 new production building with up-to-date spaces





#### Apple product development

- > About 80% of apples sold as apples, rest are pressed into juice.
- > Own products: applejuice and cider







### Apple product development

> Co-operation products: Helsinki Applejack and Glög.





## Apple juice making



Servicing also customers based on reservations. Old traditional machine. Juice making service for over 40 years.

## Apple juice making



### Berry farming changes

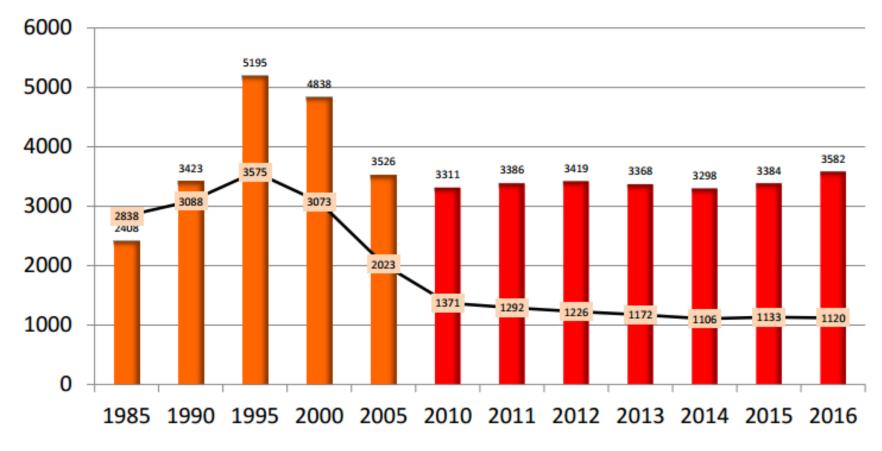
- > Berry farming has faced big changes during the last few years.
- > Especially strawberry and rasberry season has changed from previous few weeks into several months.
- > Main reason for longer harvesting season are tunnels
- > First strawberries can now be eaten in April and last ones in October ©
- People are beginning to learn that you can get fresh berries for a much longer time than before.

> The large scale frozen berry industry is helping also in keeping the fresh berry

prices in good level

# Strawberry production in Finland between 1985-2016

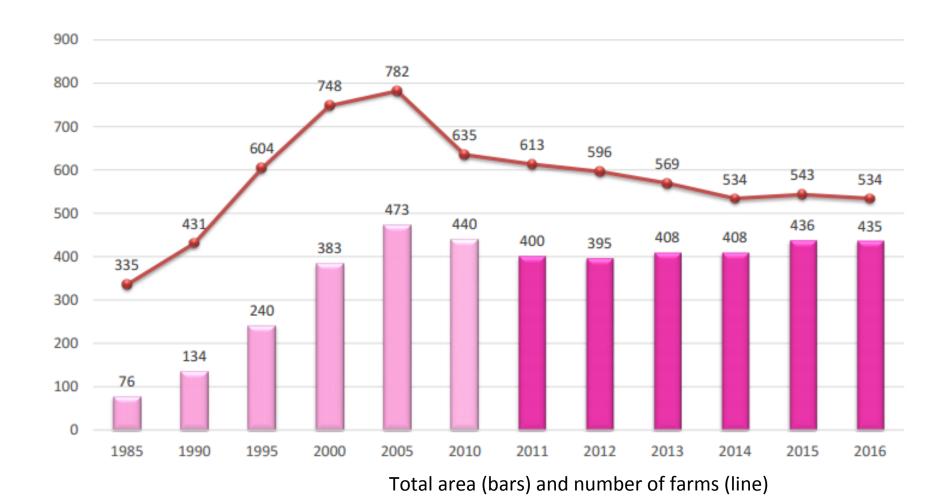
Luke Puutarhayritystilasto - HS/hml



Total area (bars) and number of farms (line)

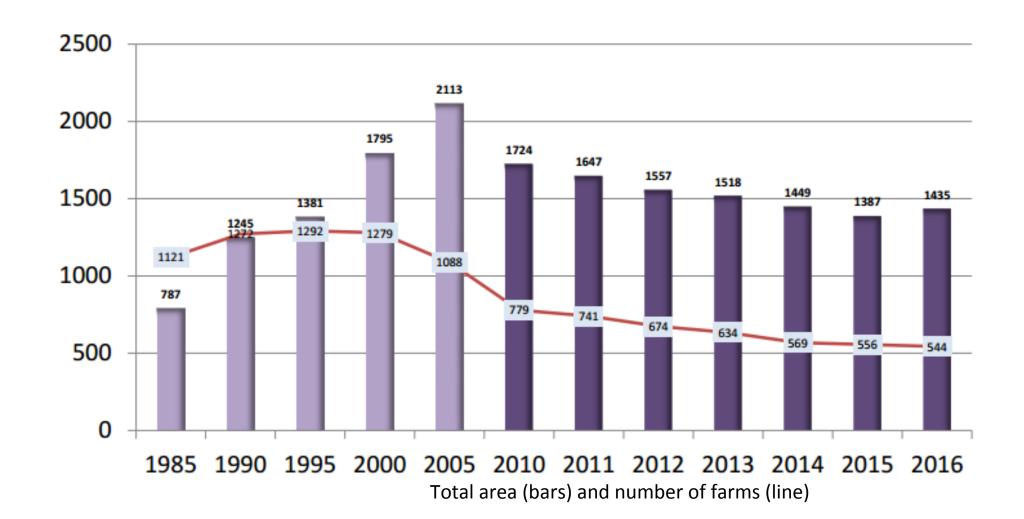
#### Rasberry production in Finland

Luke Puutarhayritystilasto - HS/hml

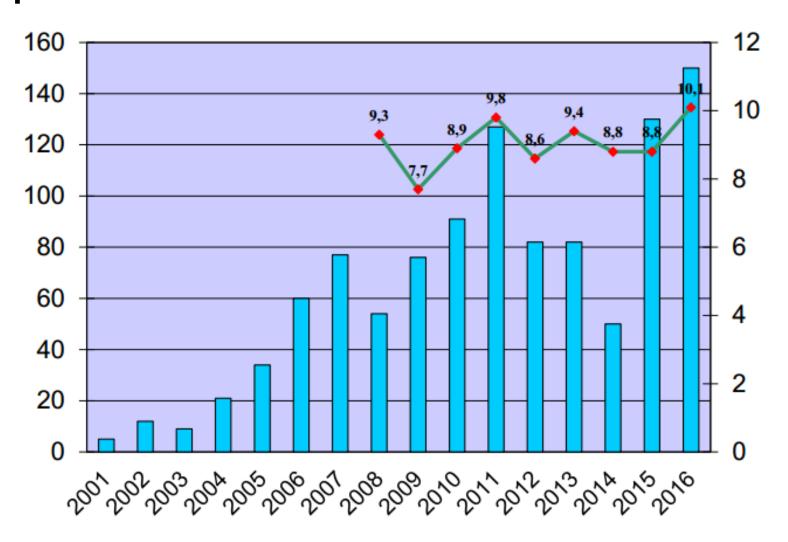


#### Black –and greencurrant production

Luke Puutarhayritystilasto - HS/hml

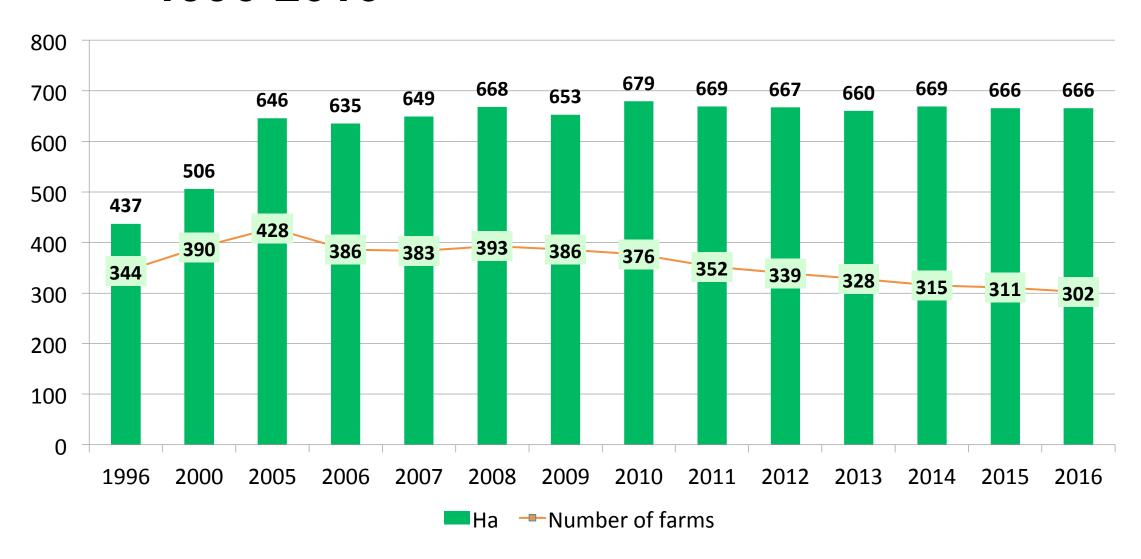


# Blueberry production volumes and farmer prices

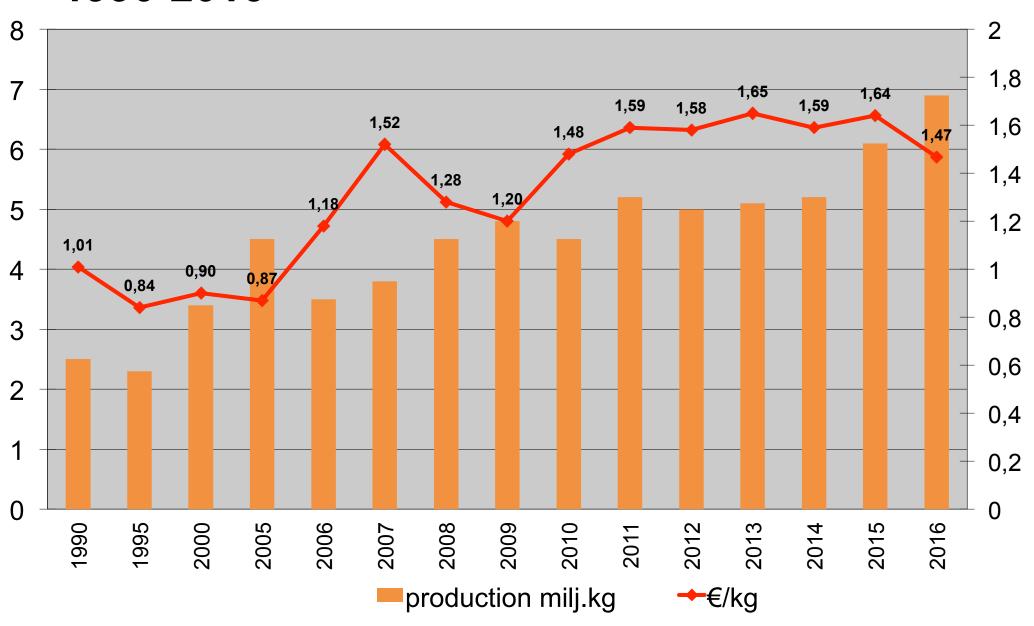


Price in €/kg (line)
Production volume in tons (bars)

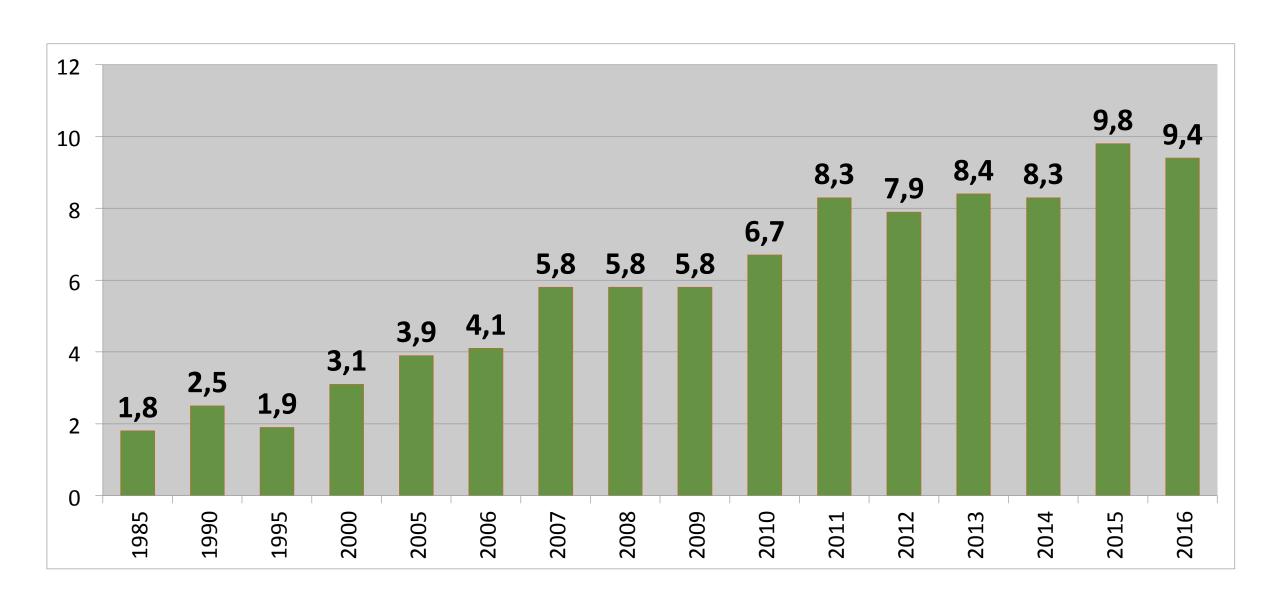
# Apple production in Finland between 1996-2016



## Apple production amount and mid price between 1990-2016

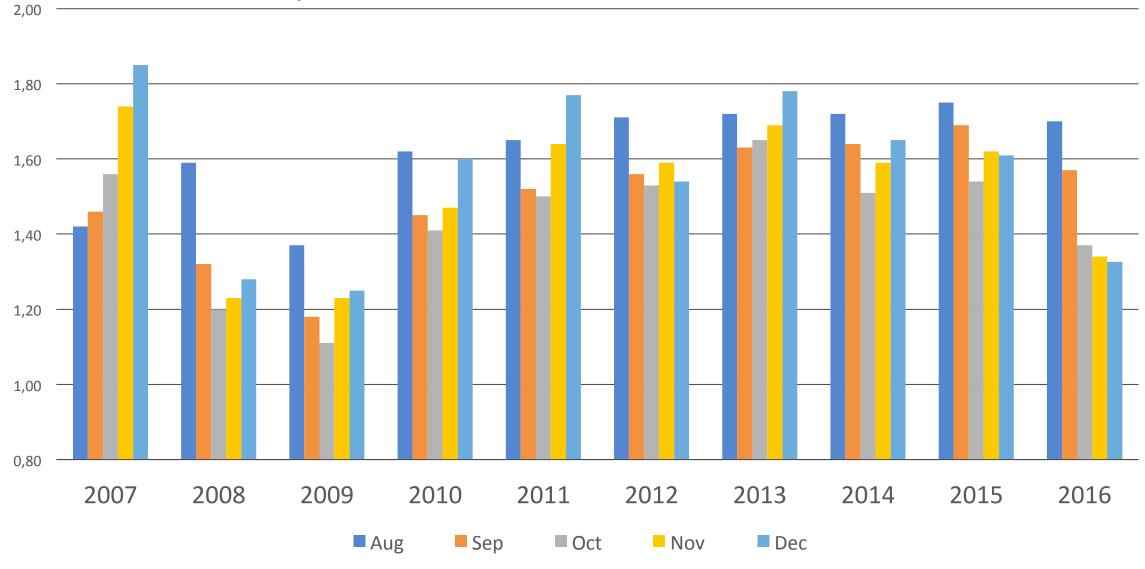


#### Value of the apple production, milj. €



# Monthly midprice of apples (€/kg, tax 0) changes 2007 -2016

Source: Kasvistieto Oy



### Changes in farming

- Climate changes threats and or possibilities?
- Longer growing season con's:
  - > Frost damage during flowering if an early spring
  - > Frost damage late autumn when picking winter apples
  - Milder winters more bugs
- Longer growing season pro's:
  - Possibilities for new varieties
  - Longer production season







#### Challanges with changes in farming

- > Limitations in allowable chemicals, pestisides and fungisides
- > Grower must always know exactly WHY, WHEN and WHAT to spray.



Installation of feromone traps

#### Hail storms



Pictures from Aug and Nov 2016



#### Wild animals

- > Damages made by deers, moose, hare ...
- Difficult to keep out





### Competition











- > Cheap apples imported ie.from Poland
  - > Even worse sold as Finish!

#### Still a lot of manual work



# Future of apple production in Finland

- Demand for local products is high
- Production volumes are increasing
- New apple varietes are bringing new possibilities
- "teaching" people to demand local apples all year round
- ► ULO (ultra low oxygen) storing



#### Future...

- Plant more trees per hectare
- Old fields 600-800 trees/ha up to 2500 trees/ha







#### **Future**

- ▶ Feed the trees with foliar sprays and drip irrigation
- Monitor the soil: too wet / too dry





#### Future...



#### Future...

- Storing the apples as long as possible
- Bring the apples into stores in perfect condition
- Concentrate on the quality of the fruits
  - ▶ You want to keep the customers loyal to your product





#### Continious learning

- Farmers are responsible for keeping up with "self-development" and training
- Many interesting things are ongoing around the world but one must be also critical
- In Finland the Fruit and Berry farmers association is holding yearly (twice a year) conferences where latest information is shared
- Co-operation with colleagues or are they competitors? (I personally don't thinks so..)
- EU laws be aware of the changes.
- Profitability calculations know where / what to invest and how much labor costs etc are.

#### Future apple production development

- Chips
- Jam
- Relish
- Sauce
- Seasoned bits in sauce
- Glög
- Vinegar
- Alcohol ...













#### More ideas from around the world...

- Future orchard systems, NZ: <a href="https://www.youtube.com/watch?v=VF6Ak6sUT2w">https://www.youtube.com/watch?v=VF6Ak6sUT2w</a>
- Mechanical thinning: <a href="https://www.youtube.com/watch?v=L6xgbgaiX\_U">https://www.youtube.com/watch?v=L6xgbgaiX\_U</a>
- Root bruning: <a href="https://www.youtube.com/watch?v=lkNIX7IZbjU">https://www.youtube.com/watch?v=lkNIX7IZbjU</a>
- Mechanical apple picking: <a href="https://www.youtube.com/watch?v=mS0coCmXiYU">https://www.youtube.com/watch?v=mS0coCmXiYU</a>
- https://www.youtube.com/watch?v=UaL3UxUclKY

