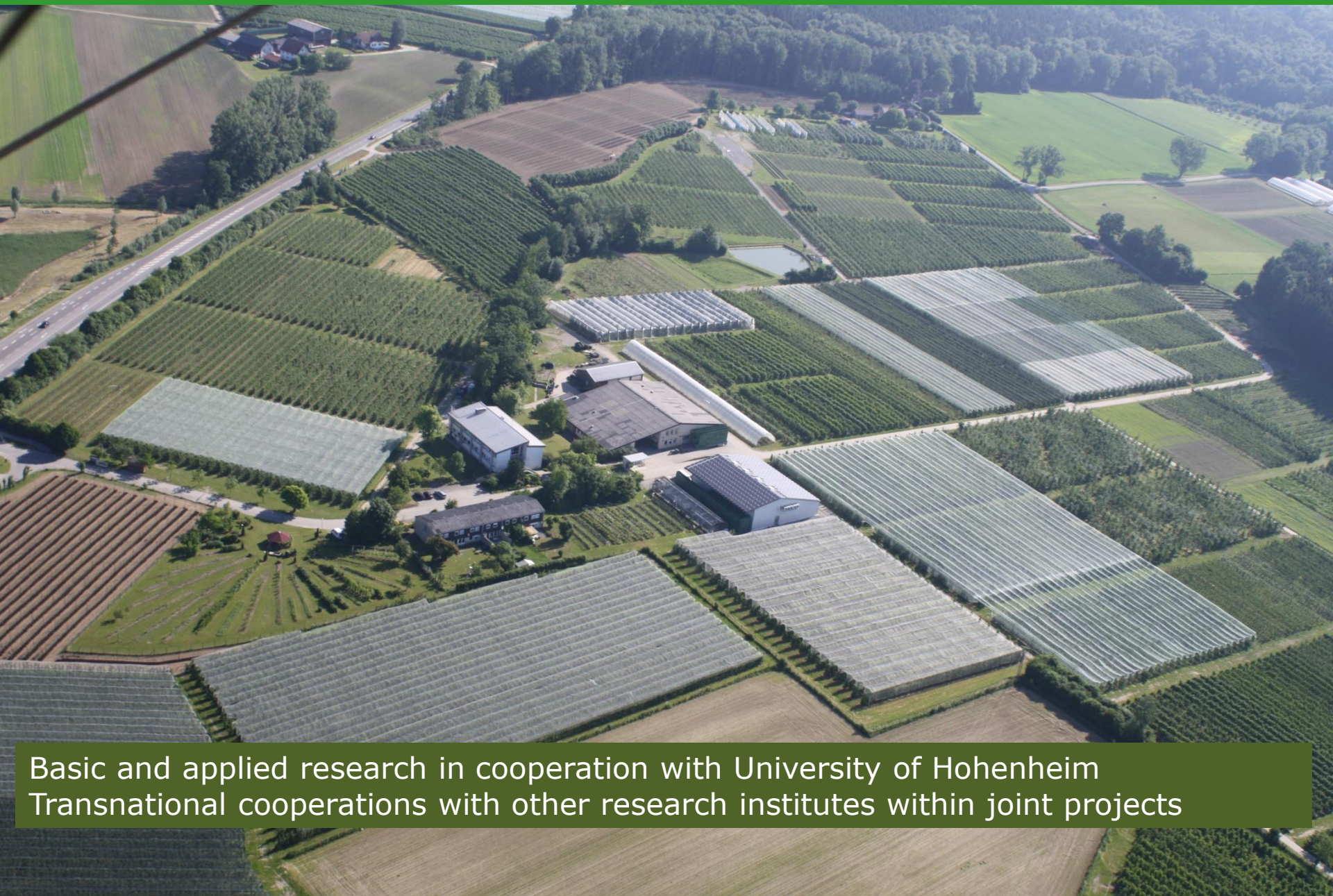
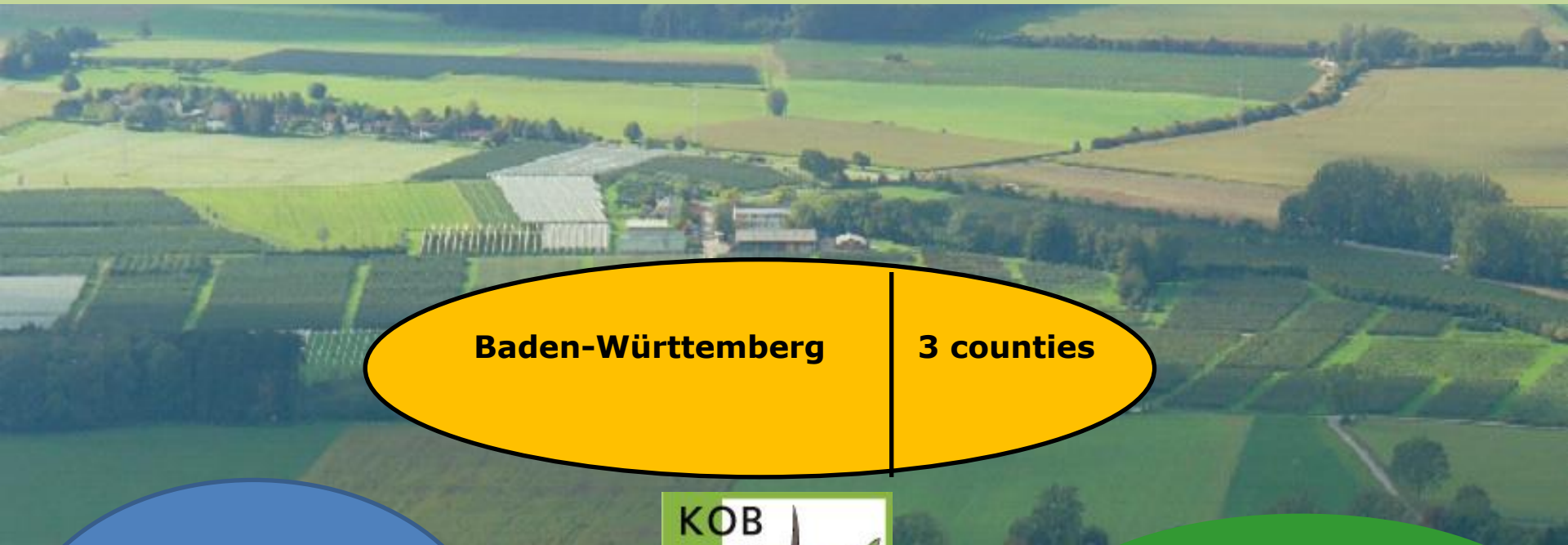


Fruit research institute Kompetenzzentrum Obstbau Bodensee



Basic and applied research in cooperation with University of Hohenheim
Transnational cooperations with other research institutes within joint projects

Organization of non-profit foundation KOB



A close-up photograph of several bright red apples hanging from a tree. The apples are covered in small, clear water droplets, suggesting they have been recently washed or it has rained. The green leaves are also wet and show detailed vein patterns. The background is slightly blurred, focusing attention on the fruit and leaves in the foreground.

Field of activities

Variety testing – Dr. Ulrich Mayr

Organic production – Dipl. Ing. Sascha Buchleither

Physiology and production technology – M.Sc. Konni Biegert

Plant protection – Dr. Christian Scheer

Post harvest, quality and storage – Dr. Daniel Neuwald

Farm management and market – Dr. Manfred Büchele

Biodiversity – Dr. Manfred Büchele

55 ha area for trials: 33 ha IP; 22 ha organic (Bioland)
400 t CA-storage, 92 single compartments

Public relations work

Publications in science and agricultural media

Presentations to farmers in Germany

Events (field days, seminars etc.)(> 50 - 500)

Guided presentations in orchard, fax, mails, newsletter etc.



General assignment of KOB

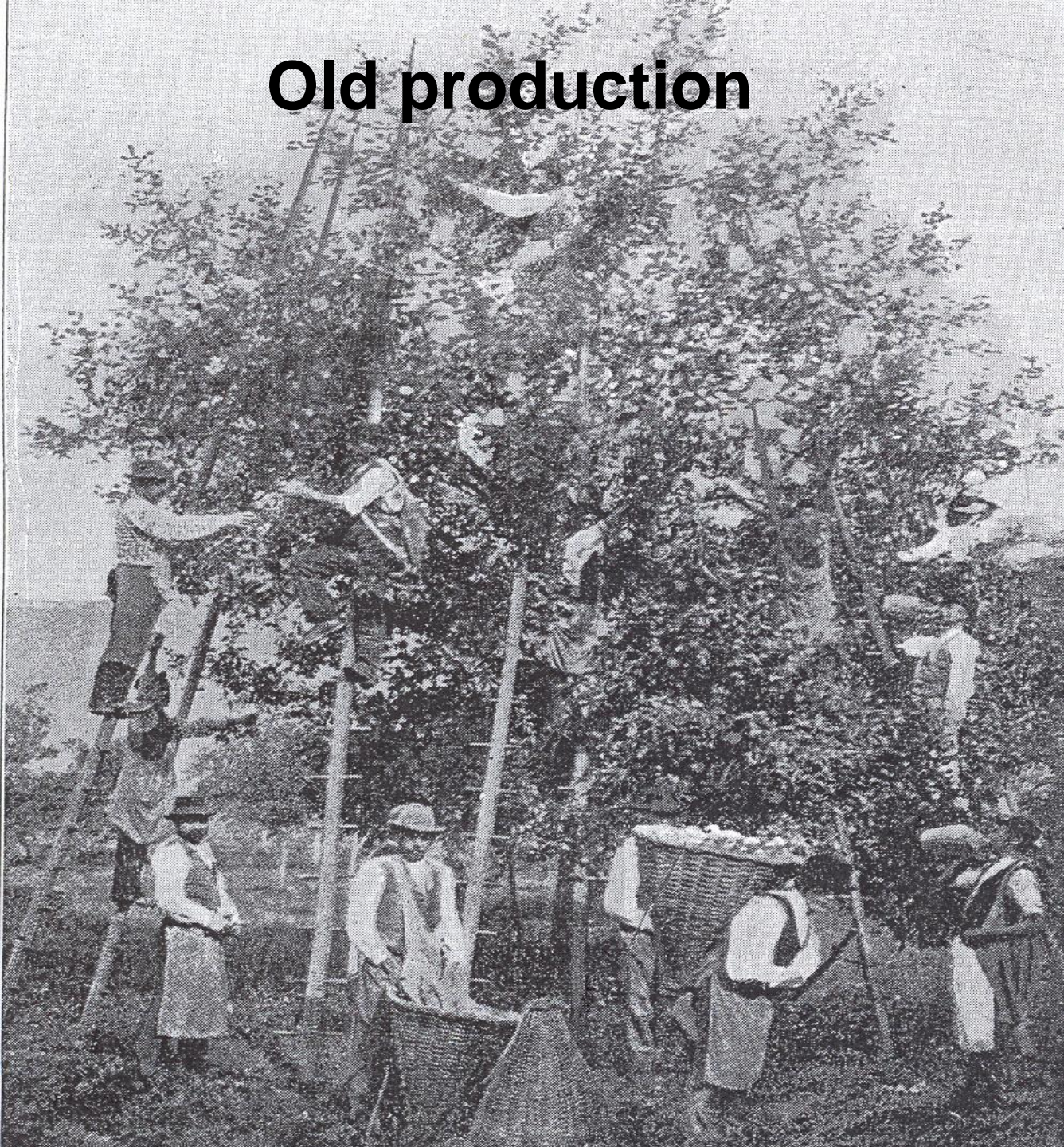
Continuous improvement in the efficiency of fruit production with regard to

- inexpensive supply of fruit for the consumer in high sensory and health quality,
- sustainable production with regard to environmental protection and biodiversity,
- adequate farmers income and social situation of the people working in the fruit industry

High intensive production with sooner and constant max. yields and best fruit quality



Old production





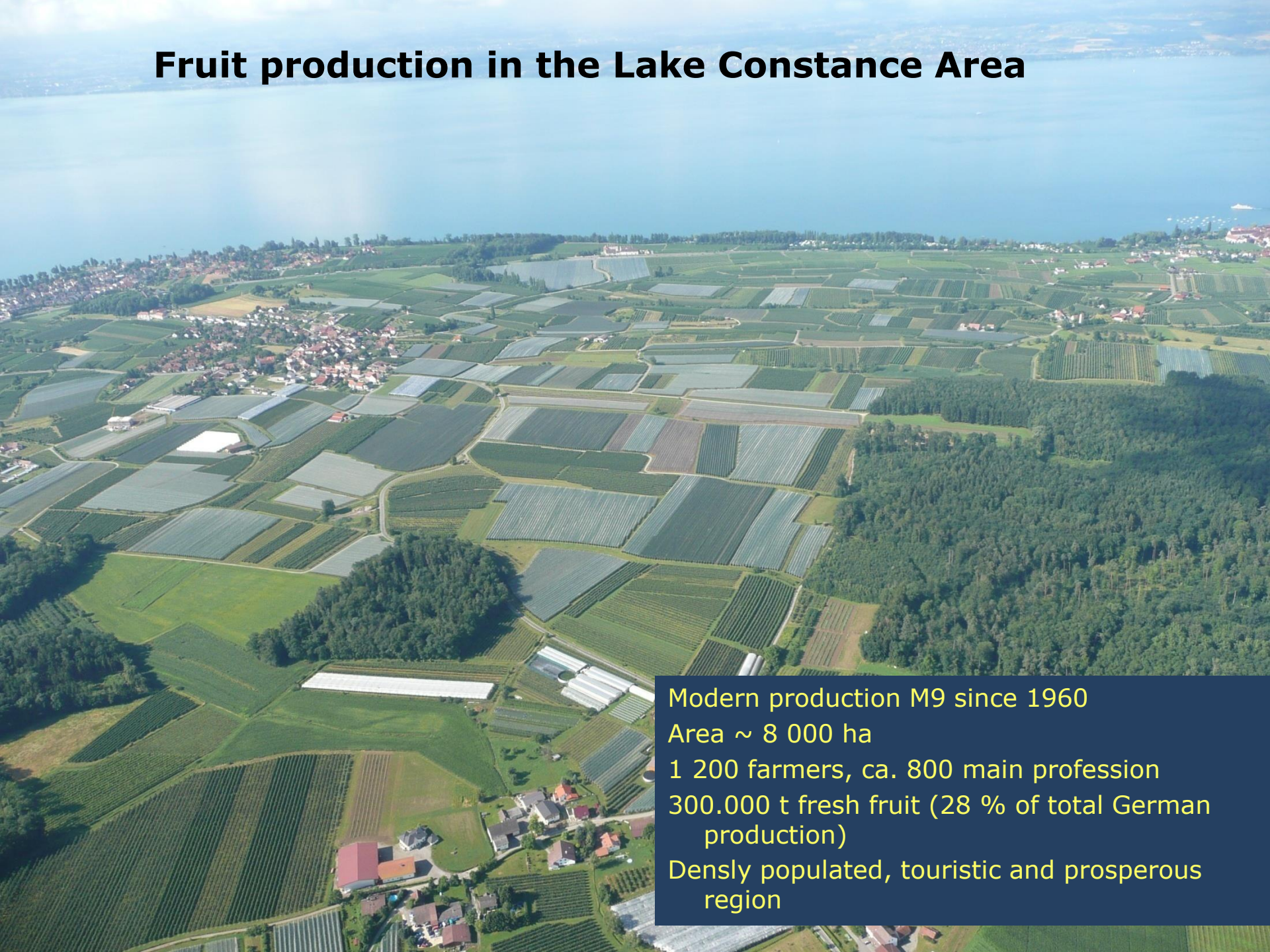
Jonagold

6. Year

3,2 m x 0,8 m

85 t/ha

Fruit production in the Lake Constance Area



Modern production M9 since 1960
Area ~ 8 000 ha
1 200 farmers, ca. 800 main profession
300.000 t fresh fruit (28 % of total German production)
Densely populated, touristic and prosperous region



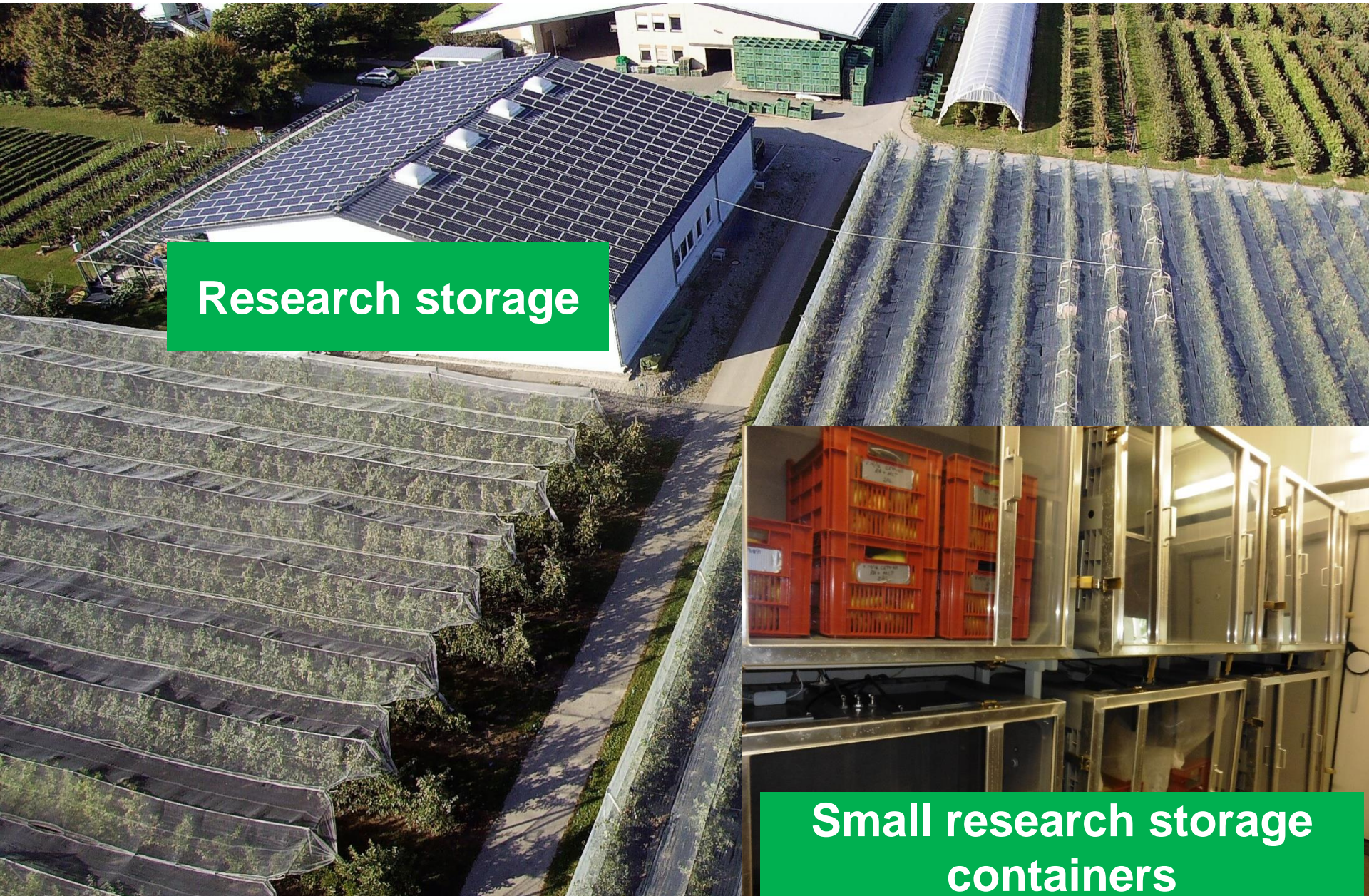
Weaknesses and Threats:

- **Pests and diseases: Scab, codling moth, fire blight etc.**
- **Hazard of hail, frost to flowering season**
- **High costs labour and investments: 3-4.000 trees/ha; hailnet**
- **Increasing competition East Europe**

Opportunities and strenghts:

- **Good education of consultants and farmers**
- **Good equipment, machinery, modern cultivas**
- **Good marketing and efficient logistics**
- **Production close to consumer in wealthy region**

Postharvest physiology and storage



Research storage



Small research storage containers

Plant protection



Administrational obligations



**Monitoring/
efficiency trials/
Projects**



**Consulting
Farmers
and government**



Public relations



Übergebietliche Pflanzenschutzberatung und Versuchswesen im Obstbau





Apfel4.NULL

Entwicklung eines teilautomatisierten Entscheidungshilfe- bzw. Steuerungssystems in der Apfelproduktion durch die Verknüpfung unterschiedlicher Sensorsysteme. Regelungsmechanismen und Modellierungen Bezug nehmend auf Wasser- und Fruchtstress sowie Baumwuchs werden entwickelt und die Bewirtschaftung der Obstanlage entsprechend angepasst.

[Weiterlesen ...](#)



Melon

Das Ziel des Projekts ist, den Erntetermin mittels optischer und zerstörungsfreier Messungen in der Obstanlage bestimmen zu können.

[Weiterlesen ...](#)



BigApple

Die wesentlichen Ziele des Projekts sind ‚big data‘- gestützte Modellierungsansätze für ein verbessertes Verständnis zwischen Vor- und Nach-Ernte-Einflussfaktoren, um eine Prognose zur Fruchtqualität und Haltbarkeit der Äpfel für die Langzeitlagerung zu entwickeln.

[Weiterlesen ...](#)



SmaArt

SmaArt soll zu einem von den Erwerbsobstbauern nachgefragten, innovativen Produkt führen, um Obstbäume in der kommerziellen Produktion individuell ausdünnen und damit den Produktionsprozess weiter zu optimieren.

[Weiterlesen ...](#)