

“Robots are the farmers of the future”.

September 14, 2020 Erik.Pekkeriet@wur.nl

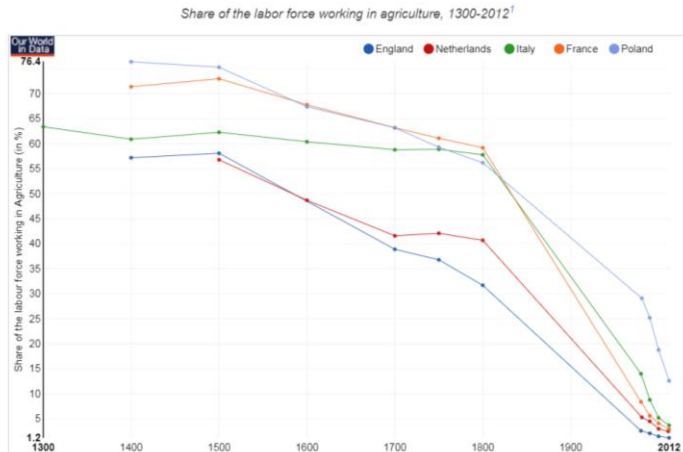
Programme Manager Agro Food Robotics



Ag-Employment

- 2/3 Japanese farmer is 60+
- China 5% in 2042

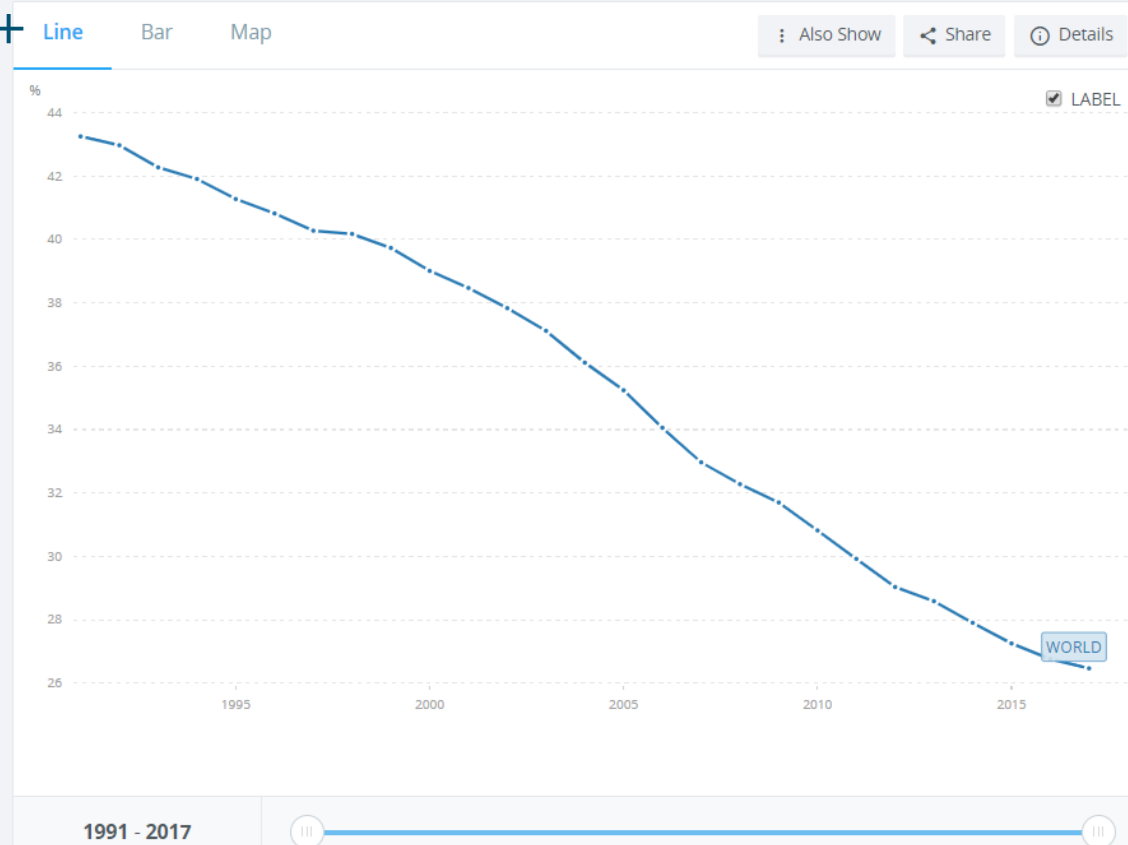
I.1 Long-Run Perspective: 1300 to Today



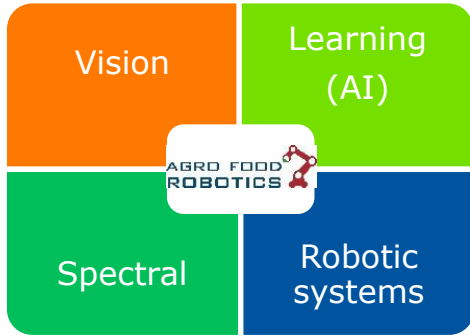
Employment in agriculture (% of total employment) (modeled ILO estimate)

International Labour Organization, ILOSTAT database. Data retrieved in September 2018.

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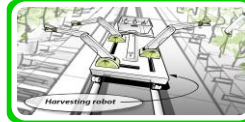
Propositions Agro Food Robotics



Optimal breeding performance



Circular agrifood Systems



Hands-free production



Objective product & process quality



Ethics and uptake ecosystems

AGRO FOOD ROBOTICS 

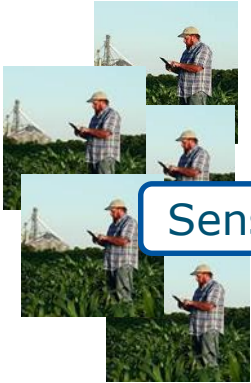
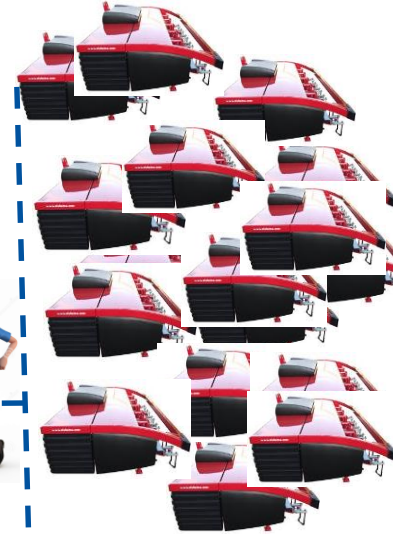

agRO
BO
food

Weeding



2D Fenotypering IRS





Sensors



Add-on



Growth

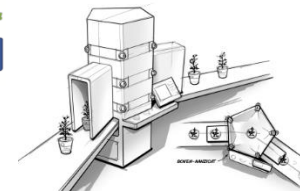
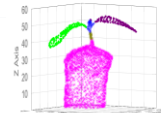


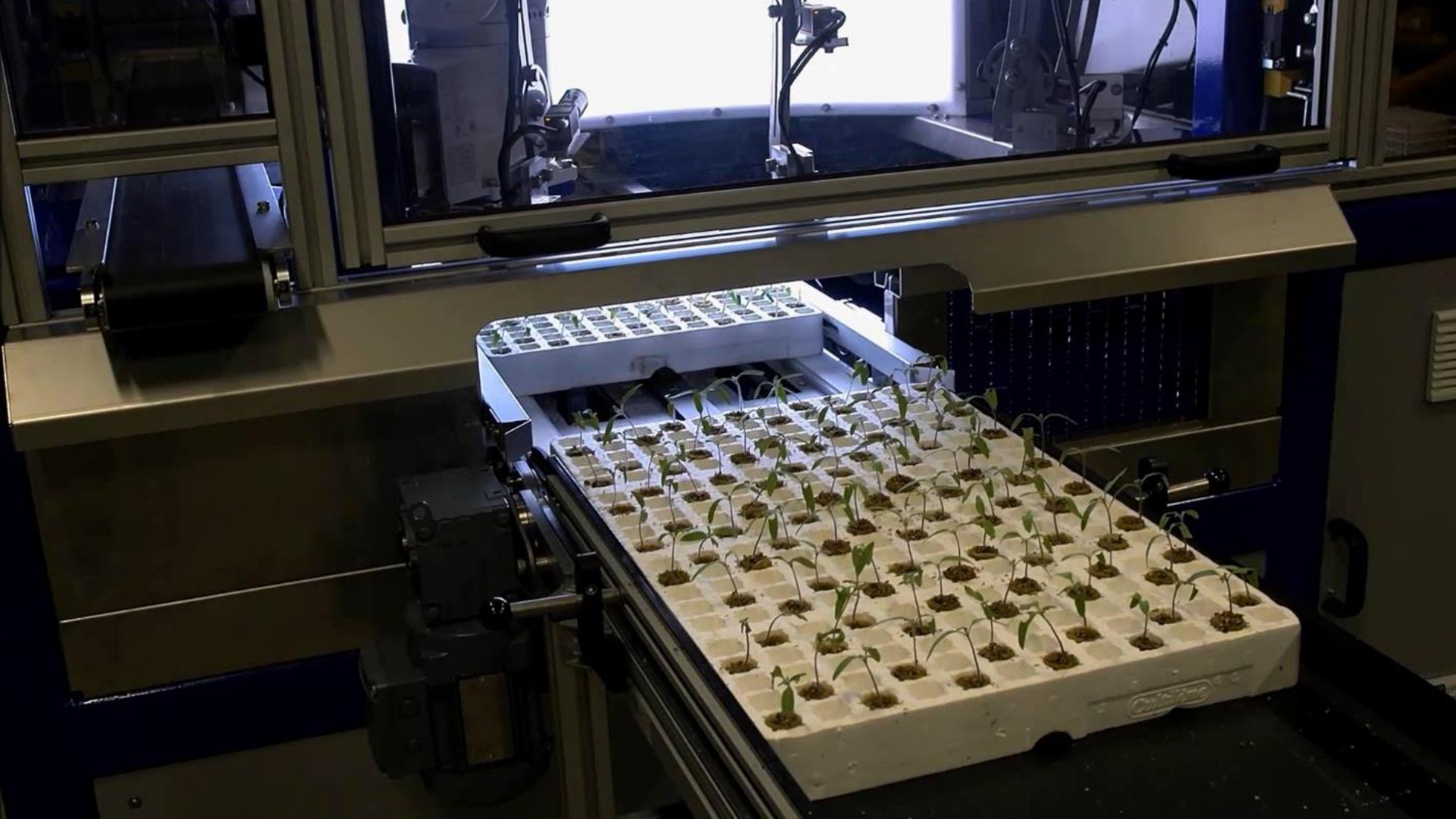
Weeds

Image Capturing Setup



3D herkenning

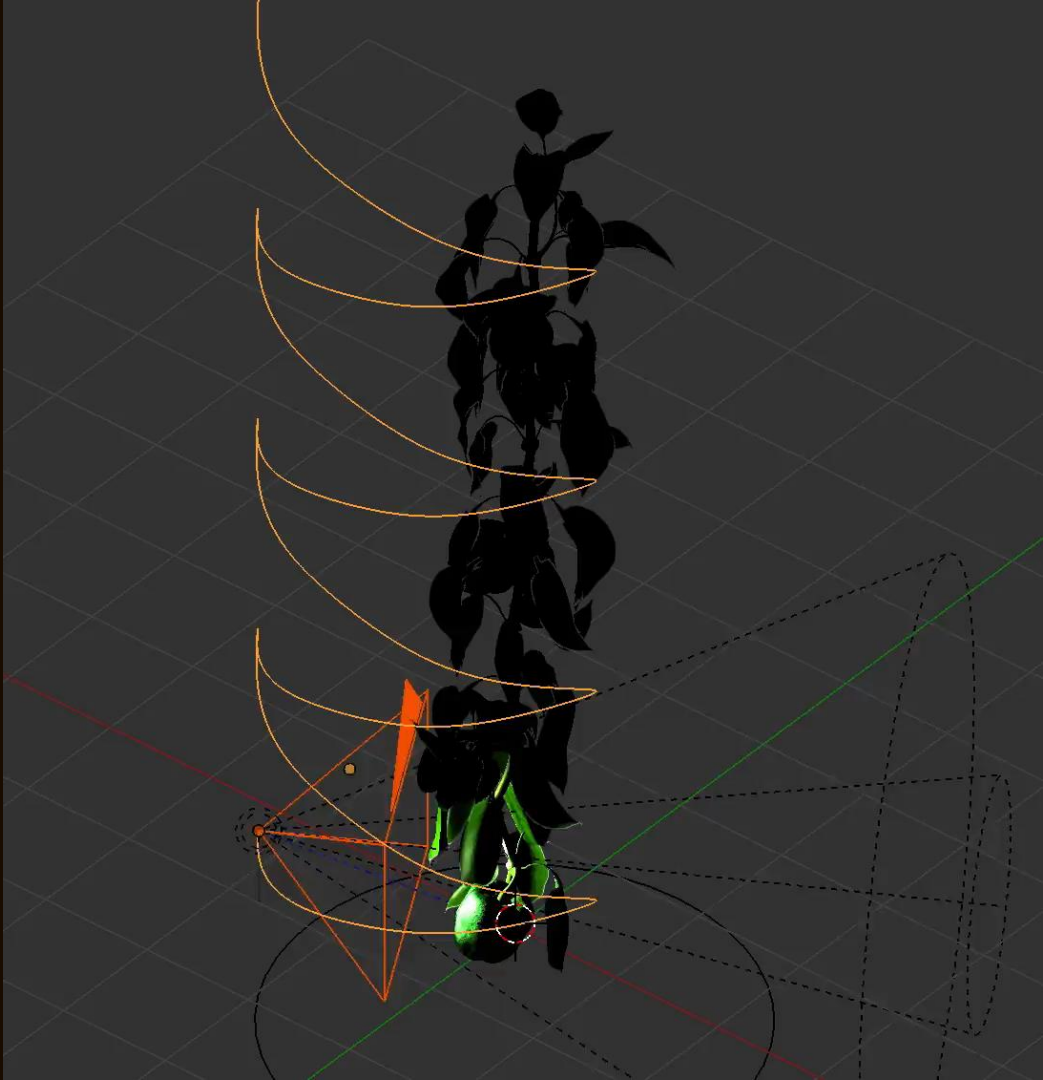




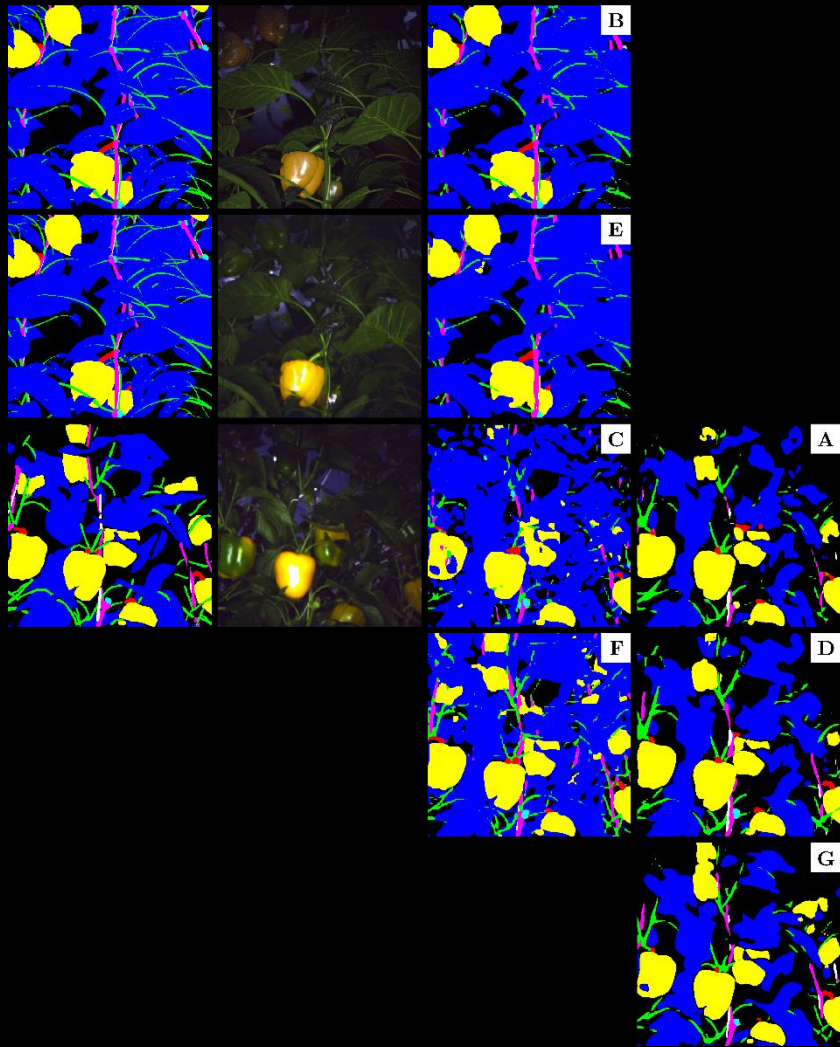


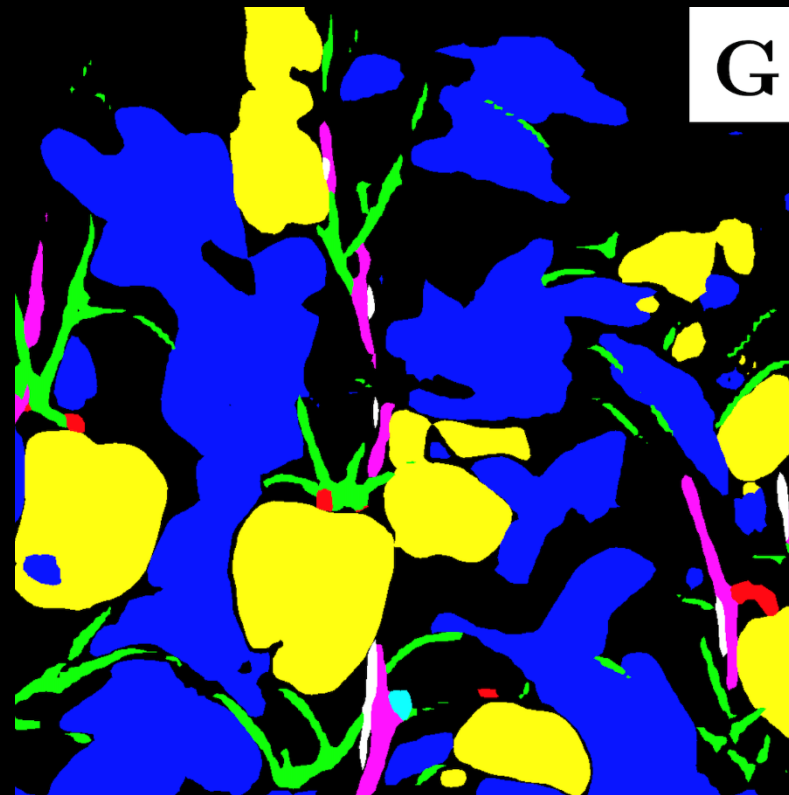
The Good Dinosaur, Pixar, 2015





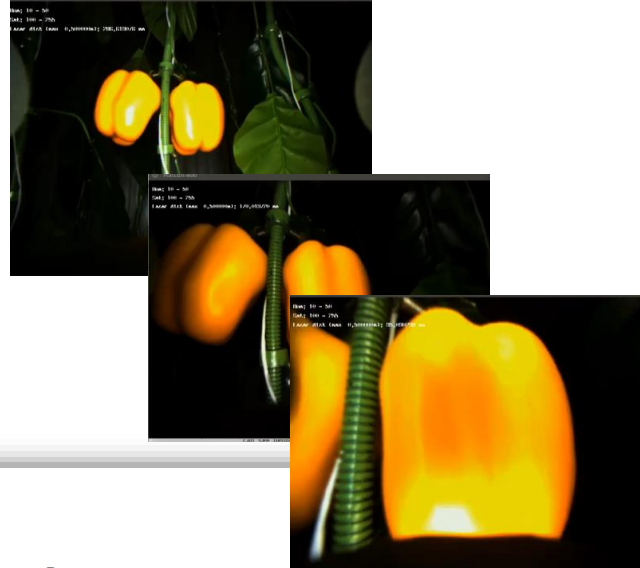






Target approach using visual servoing

- A modular software framework was developed and implemented for eye-in-hand sensing and robot motion control.



Special Issue: Robotic Agriculture

Research Paper

Design of an eye-in-hand sensing and servo control framework for harvesting robotics in dense vegetation

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Sweeper

That's all

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