



6/8

CURRENT TRL
& TARGET TRL

+ 5%

PRODUCTION
CROP/M²

+ 10%

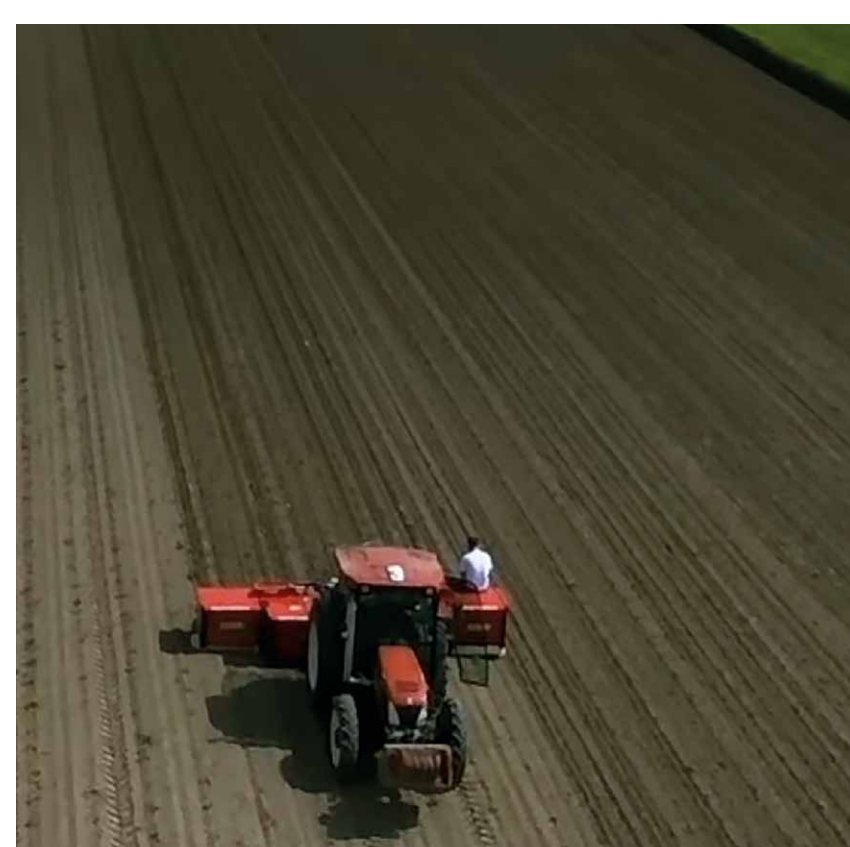
€/CROP

- 10%

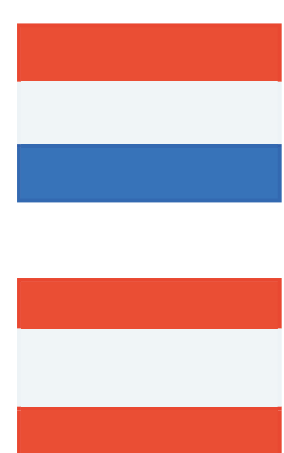
LABOUR REDUCTION

4.3 ADDED VALUE WEEDING DATA

Weeding is one of the most important and frequent activities in organic vegetable farming. This use case automates the task through an intra-row weeder, detecting the crop and weeds based on machine vision. To elevate (organic) crop production to a higher level, farmers need site-specific information on their crops. Hence, data about the crop and weather are gathered to support the farmer. As the farmers need to perform multiple tasks simultaneously, the decision support regarding their crop management must be user-friendly. By using IoT devices this use case seamlessly combines multiple data sources to support the grower. Furthermore, improved crop and field monitoring results in better field management, reducing the labor required while increasing the yield.



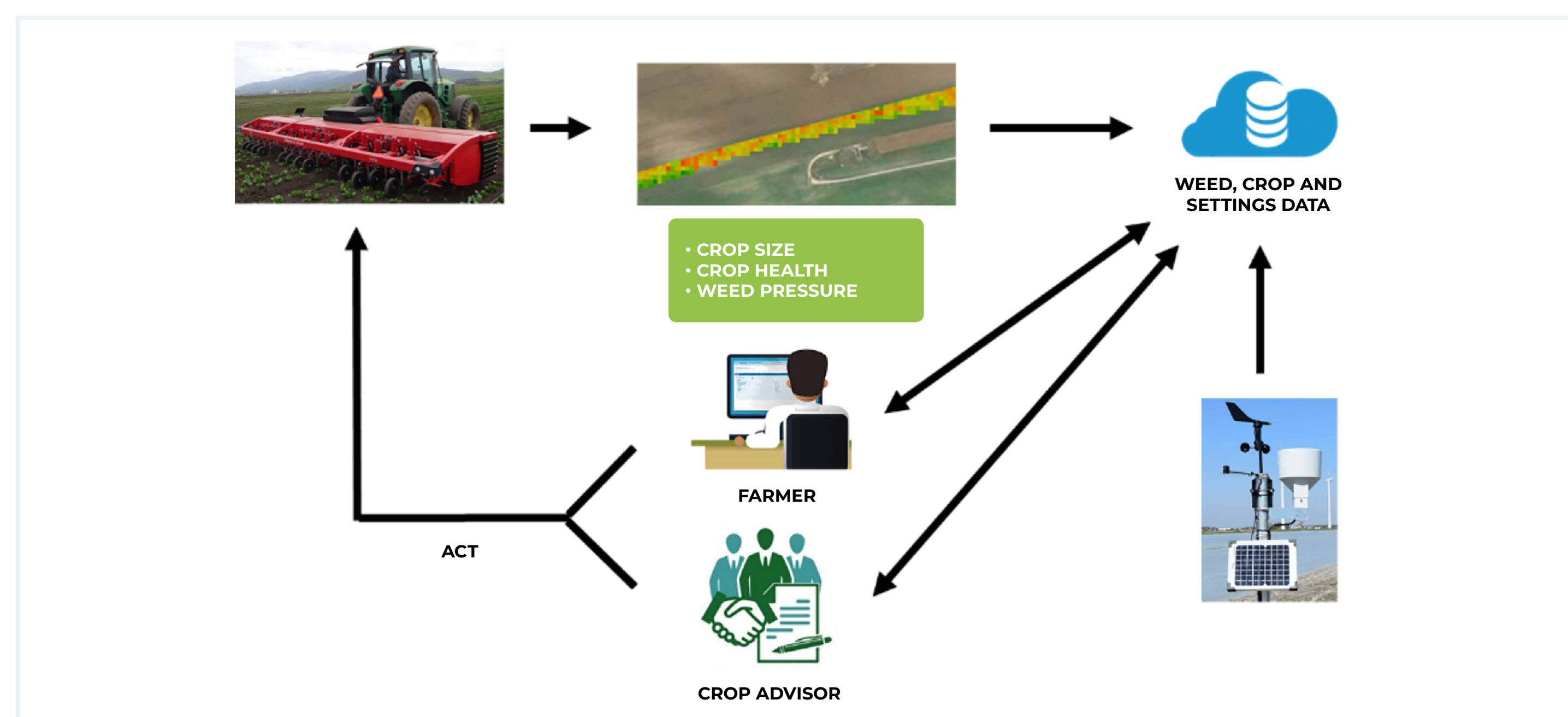
COUNTRIES



PARTNERS



HOW IT WORKS



With the Steketee IC-weeder, images of the crop are acquired and processed on board. The valuable crop parameters are sent to an online database, supplemented with yield and field data, and subsequently presented in a user-friendly way. Based on the insights, the farmers or crop advisors can improve the management of the crops.

THE IMPACT

OUR OBJECTIVES

Through improved crop and field monitoring, resulting in better crop and field management decisions, the required labour is reduced while yield is improved. For Steketee, the machine builder, added value is created through the gathered data which improves machine learning.

ON ECONOMY

- Crop yield (+5%);
- Efficiency in weed removal (+5%);
- Sales turnover (+5%);
- Fuel efficiency (+5%).

OTHER IMPACT

- Labour time for weeding in the field (-5%);
- Fatigue reduction and decreased labour intensity through data insights;
- Prediction uncertainty (-10%);
- Track historical field performance (+25%).