**CropBooster-P summary progress year 1**

As we look back on the first year of CropBooster-P we can conclude that a lot of progress has been made and a lot of work has been done.

**Introduction**

CropBooster-P is organized into 5 operational work packages: WP1, Research Toolbox; WP2, Economic, Social and Environmental Impact; WP3, Societal Needs and Expectations; WP4, International Cooperation; WP5, Strategy Development. Together, the operational WPs will develop our "Roadmap to future-proof our plants". In addition, the project knows two supporting work packages: WP6, Management, Office and Stakeholder Involvement, and WP7, Ethical Requirements.

In the first year of CropBooster-P, a total number of 15 deliverables were scheduled to be uploaded to the database of the European Commission. Currently, all these deliverables have been completed and send to the Commission.

Most of the work in year-1 of the project involved WP1 which is scheduled to end December 2019. In addition, also activities have been carried out in WP5, 6 and 7. As the main work in WP2 – 4 will build upon the results of WP1, most activities in these 3 WPs will start in January 2020.

**WP1**

When aiming to develop "future-proof crop plants", it is of course of utmost importance to consider how this future will look! In order to assess this, the work in WP1 started off with a Scenario Planning exercise in which we developed four contrasting scenarios which each would impact in a different way the 3 main crop traits we consider: Yield, Quality and Sustainability. The results can be viewed here.

Another task of WP1 was to assemble a "toolbox" of scientific and technical options to improve plant yield, quality and sustainability. This toolbox now contains over 800 literature references depicting the state-of-the-art in improving our key plant traits via either plant breeding or modern biotechnology. The toolbox is organized in a simple flat-file format, allowing easy searching of the toolbox, as well as future expansion of the toolbox itself.

Finally, also crop modeling was a task in WP1. This modelling was only done for the key denominator of crop yield, which is plant photosynthesis. The models show the future perspectives of increasing crop yield by increasing photosynthesis for a number of European key crops, at a number of different geographic locations, under a number of different scenarios for future climate change in Europe.

**WP5**

The main task of WP5 will be to compile the Roadmap at the end of the CropBooster-P project. This Roadmap will also include the blueprints for an envisaged future research consortium that will carry-out the research proposed on the Roadmap. Two deliverables were produced describing part of the *modus operandi* of this consortium. Document one will describe the form in which the products of the research program will be made available to the plant breeding industry and to other downstream users, and the second document will describes the foreseen intellectual property management framework the consortium intends to use.

**WP6**

The project management work package WP6 prepared 3 deliverables in the first year of the project; the data-management plan, the project website and the Dissemination & Communication plan. As part of the Communication & Dissemination plan, also a number of communication tools where developed like logo's and templates, Twitter and LinkedIN accounts. In addition, the first CropBooster-P Newsletter is planned to be send in December 2019

**WP7**

This work package serves to meet the ethical requirements the Commission poses to H2020 projects. The deliverables describe the procedures how we will conduct research involving human participants, and stipulates how data protection is organized at the individual partner level.