How to de-risk R&I for Plant Protection Products – the importance of capacity building and knowledge sharing

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From high level policy goals to implementation

Policy goals and market shifts are translated into innovation that reaches the market in waves

- 1st wave (short term): Reposition what is already available
- 2nd wave (medium term): Leverage R&I already in pipeline
- 3rd wave (long term): *De novo* R&I aimed at future markets

To ensure investment into R&I providing possible solutions to future challenges, UNCERTAINTY should be kept at a minimum

An innovation-friendly policy environment will reduce uncertainty while stifling regulation will increase it



From high level policy goals to implementation

The EU Green Deal's Farm to Fork strategy is putting pressure on agricultural production systems to reduce their environmental impact - e.g. replacing chemical inputs by "residue-free" alternatives

As the current situation stands, agricultural production in the EU is expected to drop significantly due to missing input alternatives (Noleppa and Cartsburg 2021).

Only through Innovation can a drop in food production be avoided – but we need an environment which supports the transition towards more sustainable solutions.

What is limiting innovation and WHY?



Example of Plant Protection Products (PPPs)



Reduce by 50% the overall use and risk of chemical pesticides and reduce use by 50% of more hazardous pesticides

...from conventional farming based on chemical pesticides towards an integrated pest management (IPM) approach!

As a pre-requisite, the portfolio of chemicals needs to be substituted by New Modalities (e.g. Microbials, Natural Substances, Proteins, Peptides, RNAi, etc.)

As of today, we observe a much faster decrease of chemicals compared to an adequate replacements of New Modalities.

This situation – Dilemma! - will cause challenges for EU food productions on mid-term perspectives

R&I landscape in EU needs to change rapidly!

Current bottlenecks for innovation

Fit for Purpose of current regulatory framework and existing capacities of regulatory bodies

Clarity and Understanding of new technologies (risk assessment, product safety, use cases, mode of action, etc.) as science usually moves faster than legislation!

This creates an uncertain market for Innovators (start-ups and SMEs) to invest in R&I in Europe

As a consequence, EU is lacking appropriate R&I infrastructures for innovators and with that required Venture Capital is not fully accessible!

Is Europe an R&I friendly space?



How to de-risk R&I for PPPs

Importance of capacity building and knowledge sharing

How to create and innovation friendly environment in the EU to attract start-ups and SMEs and encourage them to invest in R&I for Europe?

We propose to establish Center of Excellences (CoE) to create an R&I friendly environment.



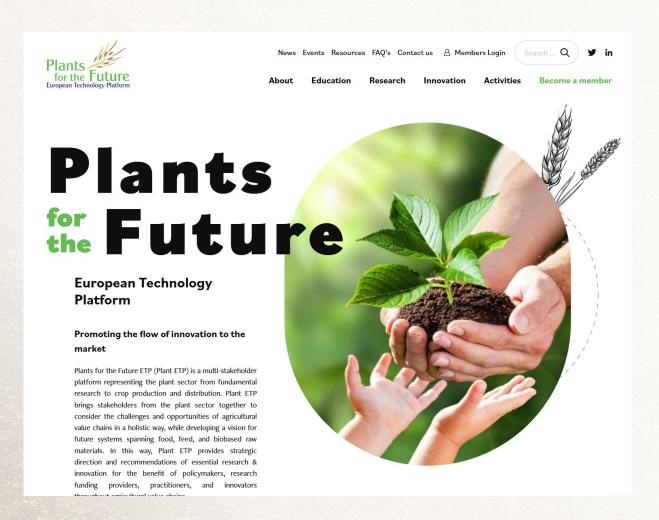
- Fully-integrated R&D Centers
- Open access (Innovators, Corporates, VC's, Regulators, etc.)
- Operated by a "3rd party"
 - providing infrastructure, service & expertise
 - ensuring proper fix-cost management
- Focussing on core technologies
 - Faster decision makings
 - Full understanding of technologies
 - Accellerated technology development

...towards an R&I friendly environment!



More to come

Plants for the Future's Policy Brief on De-risking R&I for PPPs will be published by November 2023



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