



16 March 2020

Farm to Fork Strategy

Bayer's contribution to the Roadmap public consultation

Executive Summary

- ✓ Bayer welcomes the European Commission's intentions to accelerate the transition towards a more sustainable food system;
- ✓ To achieve its ambitious goals the European Commission must embrace innovation in agriculture in order to unlock the full potential of our primary production systems. EU farmers need a toolbox that enables them to increase their productivity and, at the same time, preserve natural resources;
- ✓ We understand Plant Protection Products (PPPs) will be one feature of the Farm to Fork strategy and we would welcome well-reasoned, science-based proposals focused on a limited set of policy instruments to avoid a fragmentation of the rules across different legislations;
 - Bayer believes in the benefits of Integrated Pest Management (IPM) as a flexible approach having the benefit to develop pest control strategies that take into account all relevant control tactics, locally available methods, and are sensitive to local environment and social needs;
 - Bayer took note of the European Commission's intention to reduce dependency on chemical pesticides. We believe that the sustainable use of pesticides should rather reduce the risk and impact of the use of pesticide on the environment rather than their use. Bayer has therefore made a commitment to reduce the environmental impact of crop protection by 30% by 2030
 - Bayer understands that the European Commission wants to set quantitative targets for organic agriculture: it is important to note that there are ecological trade-offs implied by an increase of organic agriculture, which should be considered;
- ✓ Bayer appreciates that the assessment of new genomic techniques may become part of the Farm to Fork future strategy and, if appropriate, it will be followed up by a proposal:
 - Bayer strongly supports the industry-wide position that plant varieties developed through genome editing should not be subject to different or additional regulations, if they could also be obtained through earlier breeding methods or result from spontaneous processes in nature;
 - Bayer is committed to addressing principles of safety, transparency and sustainability on specific crop applications;
- ✓ When introducing sustainability standards the EU should adopt a science based, globally compatible approach that sufficiently takes into account the agronomic needs of farmers in markets that produce crops exported into the EU

Bayer welcomes the European Commission's intentions to accelerate the transition towards a more sustainable food system, capable of adapting to and mitigating climate change and – equally important – ensuring food security and thus integrating social, environmental and economic needs brought forward by society.

We understand that in order to deliver and to achieve this transition the European Commission is planning a series of measures consistent with the scale of its ambition.

To achieve its ambitious goals the European Commission must embrace innovation in agriculture in order to unlock the full potential of our primary production systems. EU farmers need a toolbox that enables them to increase their productivity and, at the same time, preserve natural resources. High quality seeds with adapted characteristics (incl those achieved with new genomic techniques), digital farming services and pesticides are crucial elements of such a toolbox. Bayer has set itself the mission to deliver world class innovation and develop tailored solutions to farmers. That means, we are dealing with the variability that is inherent on every single farm and offering the grower a better choice more suited to their specific needs as opposed to a standardized “one size standard fits all solution”. As such, Bayer provides farm products like seeds, pesticides and digital services that can be used by all farmers, from organic to conventional, to increase their sustainability performance, and to support their actions for IPM.

This requires a science-based regulatory system that delivers predictable and proportionate legislation and regulatory decisions. We believe that the EU needs to increase its efforts to provide this innovation-friendly regulatory framework.

We understand Plant Protection Products (PPPs) will be one feature of the Farm to Fork Strategy and we hope for well-reasoned, science-based proposal focused on a limited set of policy instruments to avoid fragmentation of the rules across different legislations.

Indeed, regulatory and legislative measures capable of delivering the ambition to reduce dependency on chemical pesticides are already in place and, in our opinion, do not need to be re-invented. However there is substantial room for improvement with regard to a better implementation:

DG SANTE is preparing the final report regarding the REFIT exercise conducted on the Regulations 1107/2009 concerning the placing on the market of plant protection products¹ and 396/2005 on Maximum Residue Levels (MRLs) of pesticides². In our

¹ Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC;

² Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC Text with EEA relevance;

view the legislation is fit for purpose and delivers on its goals to protect human health and the environment. We believe that any necessary improvements can be achieved by ensuring better implementation of the current system to enable innovation, rather than by amending the legislation. In particular Bayer recommends:

- Measures to ensure that new innovative solutions (both chemical and biological) are brought faster to the EU market. This was a key objective of Regulation 1107/2009. In practice however, the rate and number of new innovative solutions in the EU is now lower than in other major OECD countries;
- Faster evaluation and decision making for innovative products, including new MRL's, to ensure equally faster market access, which would also reduce the need for emergency authorizations, required as the zonal evaluation process is too slow;
- Better coordination between Member States regarding the evaluation of both active substances and products, especially to improve the mutual recognition of evaluations made by Zonal Rapporteur Member State;
- Simplification of an excessively complex regulatory system;
- Scientifically robust decision-making based on risk assessments and clear guidance agreed at international level;
- Improved efficiency in the evaluation and decision-making procedures, ensuring that timelines in Regulation 1107/2009 are respected by risk managers;
- Support for food and feed trade within and outside the EU;

A revision of the Sustainable Use Directive (SUD) is also advisable along these following recommended lines:

- To encourage Members States, via their National Action Plans, to focus on the reduction of risks concerning the usage of pesticides for human health and the environment. This can be achieved by establishing additional complimentary risk indicators at national level in the context of agricultural productivity needs;
- To continue monitoring and supporting Member State's competent authorities as well as farmers' efforts in the implementation of the Sustainable Use Directive, and report back to the European Commission in order to have a better understanding of where the gaps and practical difficulties exist which hinder its full implementation
- Whilst ensuring farmers have access to a wide ranging toolbox of crop protection solutions, continue to promote the uptake of Integrated Pest Management principles by all farmers across Europe, considering that such principles will vary across the EU due to the diversity of agricultural production, climatic conditions, soil structures, pest pressure, etc.

- Ensure that training and certification schemes for farmers, operators and application equipment are kept consistently updated at national level, and drive the harmonization of application technology standards across the EU
- Continue to ensure the monitoring of food and water in line with current EU legislation on Maximum Residue Limits and Water Framework Directive
- Identify possible outdated aspects in the current Directive, and consider possible remedies to accommodate the benefits and potential for new technologies that may come to the market after drafting of the current Directive e.g. state-of-art drift reduction application technologies and precision application with e.g. drones
- In order to ensure an adequate implementation of IPM, foster the development of the farmers' pest control toolbox, by establishing clear and workable processes and risk assessment guidance criteria allowing new substances (e.g. Low Risk active substances) to be registered faster.

Bayer fully supports Integrated Pest Management (IPM) as a flexible approach which makes the best use of all available technologies to manage pest problems effectively and safely. IPM has the benefit of developing pest control strategies that take into account all relevant control tactics and locally available methods, and are sensitive to local environment and social needs. IPM strategies consist of three basic components: 1) Prevention of pest build-up through use of appropriate crop cultivation methods and other techniques; 2) Observation of the crop to monitor pest levels, as well as the levels of natural control mechanisms, such as beneficial insects, in order to make the correct decision on the need for control measures; 3) Intervention where control measures are needed

The successful user of IPM will evaluate the feasibility and potential cost effectiveness of each alternative as well as the whole control strategy.

Bayer took note of the European Commission's intention to reduce the dependency on pesticides. We believe that the sustainable use of pesticides should focus on reducing the risk and impact of their usage on the environment rather than their reducing their use. Bayer has therefore made a commitment reduce the environmental impact of crop protection by 30% by 2030. We intend to achieve this commitment with a combination of innovative tools including - but not limited to - modern application technologies, mitigation measures (reducing off-target effects of pesticides), compounds with better environmental profiles as well as the increased use of biologics and breeding.

Bayer understands that the European Commission wants to set quantitative targets for organic agriculture. We believe that organic production has a role to play in the mix of agricultural systems and therefore we support the European Commission's aim to increase organic production in Europe in order to meet growing consumer demands. We believe that consumers' choice and demand should drive agricultural production rather than politically motivated targets. We therefore doubt that such a measure will lead to

economically viable solutions for the organic sector. Organic agriculture delivers on average considerably lower yields than conventional agriculture. Under the assumption of constant or even growing demand for food, feed or fiber, organic agriculture would need substantially more agricultural land to produce the same amount of agricultural produce than other farming systems. This needs to be taken seriously into account when comparing agricultural production systems. Bayer believes there is no such thing as an intrinsically sustainable farming system. The sustainability of any farming system, organic or conventional, depends largely on the tools a farmer has available and how these are used as part of Integrated Pest Management (IPM). Bayer believes that stimulating sustainability in farming should therefore not be directed at a specific farm system: farm policies should be inclusive towards all farmers and directed at solving the sustainability challenges farmers do face.

We also appreciate that the assessment of new genomic techniques may become part of the Farm to Fork future strategy and, if appropriate, it will be followed up by a proposal.

Genome editing is a ground-breaking scientific innovation whereby the modification of specific genome sequences in living organisms has become easier and more precise. These innovative tools are cost-efficient and widely accessible and will allow researchers from all over the world to address multiple challenges in both human and animal health, in agriculture and food production.

The development of new genomic techniques, including genome editing applications in plants, is proceeding at considerable pace across the globe, supported by pragmatic policy decisions taken in many countries, where plants derived through genome editing are considered conventional plant varieties. To the contrary, the EU currently considers that the use of genome editing tools (i.e., “new” targeted mutagenesis methods) shall be regulated in the same way as genetic modification (i.e., Genetically Modified Organisms - GMOs). Plant varieties produced using genome editing would thus be subject to a lengthy and costly regulatory process under the GM Directive. Meeting the obligations of the GM Directive implies costly and heavy pre-market evaluations and a long duration of the approval process, which are difficult and onerous to bear, particularly by small and medium enterprises. This European Union policy outcome puts at huge risk the competitiveness of European plant breeders, investment in plant innovation and globally sustainable agriculture. Additionally, this lack of consistent policy outcome adds uncertainties leading to high risk of trade disruption. Consistent policy approaches are required to comply with agreed international regulatory and trading standards and to avoid potential trade barriers.

- Bayer considers the regulatory environment for genome-edited crops in the EU highly challenging and detrimental for the agri-food chain and for society at large;
- Inconsistent policy outcomes for products of plant breeding innovation discourage investment and may preclude application of innovative tools by

both public and private sector and impair the international competitiveness of European breeders (large and small), as well as the EU market.

- Bayer strongly supports the industry-wide position that plant varieties developed through genome editing should not be subject to different or additional regulations, if they could also be obtained through earlier breeding methods or result from spontaneous processes in nature.
- Bayer supports initiatives that advance a broad, transparent, balanced stakeholder and societal debate on the future use of genome editing in Europe. Along with leading scientific institutions and key value chain members, Bayer asks for an EU-wide regulatory approach to genome-edited plants that foster scientific advancement on products that benefit society, while ensuring a high safety standard for human health and the environment.

Bayer is in the early stages of exploring genome editing applications for seeds and microbial products and is committed to addressing principles of safety, transparency and sustainability on specific crop applications.

In fact, applications of new genomic techniques, including genome editing, in agriculture create many opportunities to develop products that are essential for adapting to climate change, reducing reliance on finite resources, reducing inputs, enhancing biodiversity and that can greatly contribute to achieving global sustainability targets. Scientists from both public institutions and industry are developing plants with improved pest and disease resistance that will result in more stable crop production and reduced chemical inputs, plants with improved levels of stress tolerance (e.g. drought tolerance), plants that crops that are more efficient in their use of water and the uptake and usage of plant nutrients resulting in reduced inputs and run-off of chemical fertilizers.

The European Commission has indicated that the size of the EU consumer market can be used as a lever for implementing new cross-border standards for agricultural food and feed production. When developing such sustainability standards the EU should adopt a risk based approach that is globally compatible and should put sufficient emphasis on the agronomic needs of farmers in third countries exporting to the EU.

Much of the European Union's downstream value-added food production is heavily reliant on imported food and feedstuffs from developing markets in the Global South (e.g. Latin America – soy/coffee/bananas; West Africa – coffee/cocoa; Southeast Asia – tea/coffee). Countries that cultivate these products for the European Union are striving to meet the United Nations Sustainable Development Goals. They aim at reducing rural poverty, they are striving towards zero hunger, they aim at mitigating climate change. If the EU imposes technical barriers to trade through imposing new standards for access to the EU market on developing countries, they will deprive these countries of opportunities for economic development and environmental sustainability.

General remarks

Clear goals and concrete Key Performance Indicators (KPI): Clear goals and concrete KPIs are important to stimulate the social, environmental and economic change the Commission is aiming at. Farmers and the food value chain need direction in relation to the sustainability challenges the European Commission intends to address and which contribution European farmers and food value chain partners need to deliver to contribute to the main ambition. When it comes to farming, important challenges are climate mitigation and adaptation, biodiversity, pollution, resource use, product quality and safety, income and innovation. It is important for farmers to get clarity on what needs to be delivered in order to be able to decide on the concrete actions to take.

Cost – Benefits analysis: Bayer believes that the decisions on goals and KPIs should be driven by science and based on a sound cost – benefit analysis capturing social, environmental and economic considerations enabling informed decisions and dialogue on tradeoffs and synergies. This requires not only the development of cost-benefit tools, but also full transparency on outcomes and applied methodology.

International context: Bayer wants to stress the importance of multilateralism for a more sustainable food system. Europe is part of a global food system wherein European policy affects policy development elsewhere and vice versa. Sustainability challenges like climate change, biodiversity loss and food security cannot be solved unilaterally: cooperation at international level (WTO, WHO, FAO, etc) is essential.