



We create chemistry

# Capital Markets Day 2019 Agricultural Solutions Transcript Q&A September 27, 2019



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## Keynote Agricultural Solutions

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**Thomas Wrigglesworth (Citi):** On the 6 billion euros peak sales, are there a number of projects that have disproportionate amounts of contribution to others? Could you identify that?

**Dr. Peter Eckes:** You have heard a lot about Revysol. That is certainly something that stands out in this overall mix. Clearly, this is a blockbuster, something that we have introduced and, particularly in the timeframe that you are looking at as an analyst, making a significant contribution.

**Vincent Gros:** If I may add something: When it comes to insecticides, when it comes to new traits, this is just incremental business. When it comes to fungicides, of course, there is a part of substitution. But we plan to increase significantly our market share also in fungicides. This will lead to additional revenue.

**Oliver Schwarz (Warburg Research):** I am just trying to understand your 1 percent growth above market. Looking at slide 8, market growth seems to be expected by 2 to 3 percent CAGR. Basically, 1 percent plus is more or less 50 percent above market growth, right? How much M&A is in that? Or is that organically?

**Vincent Gros:** It is organic growth. Potential M&As are not in, future collaborations are not in.

**Oliver Schwarz (Warburg Research):** Okay. And a second question quickly on your expected increase in development costs. You stated that there is only a slight increase earmarked for that in the coming years. But given your pipeline and the huge number of projects in development, how is it that costs are not increasing more than that?

**Saori Dubourg:** I think, Peter mentioned that: because what we looked at is focus, focus on the winning place. That also applies to R&D. So, we looked at the crop protection products we had and reallocated them to the crop systems. Then some of them were just things you can do, but it doesn't add to crop systems. That is how we shaped it. Right, Peter?

**Dr. Peter Eckes:** Yes. I said that, with the optimization of the portfolio and the focus on these four crop systems, we are actually reducing those projects that are not considered as key in our strategy. So, there are 100 million euros that we can re-employ basically also to drive the pipeline for the four crop systems then.

**Andrew Stott (UBS):** I just wonder if you would share your ambitions even if not in detail, some broader sense of your commercial revenues from digital. I get there is cost, you have said that – clearly, the 70 million euros investment.

You said: 1.2 million users. I am assuming not all of those are fee-paying. But can you give us an idea of how many are fee-paying today? Is there a specific target you can share with us on that? Then, on a per-acre basis, can you give us a range?

**Vincent Gros:** I don't have precise figures to share with you. But what I can tell you is that the number of direct digital contacts we have with farmers is increasing each and every day in an exponential way. So, we are speaking in the future of tens of millions of direct contacts.

When it comes to the revenue generated by the new digital tools, this will have an impact on the sales of our existing portfolio of crop protection and seeds. This is already included in our strategy, in our sales plan over the next ten years.

Then, on top, we have this new disruptive business model. Just to answer your question: When it comes to fungicide protection – this is something we will launch in 2020 already in a couple of countries – the fee to have a disease-free field for farmers will be 250 euros per hectare, but you have everything in. You have the cost of the products, you have the treatment – this will be done by a contractor – plus all the recommendations provided by our digital tools.

**Andrew Stott (UBS):** But the question is: Are you invoicing separately for the access to the app in the xarvio Field Manager or not?

**Vincent Gros:** Yes, we do.

**Saori Dubourg:** The most important part of this is what we reshaped strategically. Originally, xarvio was more linked to a long-term target based on data generation. What we tried to do is create revenue streams immediately by linking it into the crop system, plus the service package. I think that is the biggest change because we want to have revenue as soon as possible.

**Patrick Jahnke (DEKA Investment):** Just a sort of more macro question: How much is the business about taking market share and how much is it about growing? I think, in theory, you are so successful that it is an deflationary business, you are raising yields so much that prices are not really going up.

**Vincent Gros:** It is more or less 50:50. Half of the growth is driven by the market growth, the rest is driven by market share increase.

**Tony Jones (Redburn):** Following on from Andrew's question, could you actually talk about the pricing strategy for xarvio? Is it per acre or is there some other way you do it? Could you talk about your capabilities in gene editing? Is that featuring in the current pipeline or is it a longer-dated type of thing?

**Vincent Gros:** Extracting value out of the digital tool is a challenge. At the moment, it is not what we observe in the marketplace. So, there are different ways to extract value out of it. We can sell the services per se. We can also increase the loyalty of our customers to get revenue via more sales of our existing portfolio of crop protection and seeds.

When it comes to the disruptive business model, again, we will invoice farmers directly. They will have fees to get this guarantee and this convenience of having protected fields. But we don't share how much it will represent in our EBIT growth.

**Dr. Peter Eckes:** Genome editing: We established the technology in BASF as one of the key technology capabilities, Martin was talking about. This is why we actually build the base because it is of relevance not only to the ag business, but also to industrial biotech.

Now, in ag, there is a real challenge. We use the technology really for, I say, discovery. In the wheat program, e.g., we use it to really understand how we have to optimize the genome in this breeding process. But we will not use it in products because with the current EU Court ruling last year, this would not be possible.

On Wednesday, I actually was here in the EU Parliament to talk with Members of the Parliament because that is truly an issue for the entire industry. But right now, we have to basically state: We will not move forward with products based on genome editing in our portfolio.

**Laurent Favre (Exane BNP Paribas):** My question would be related to the market assumptions, on the 2 to 3 percent for the market. Every innovator that has talked publicly in the past nine months has said, I will outgrow the market. Do you think that remains a stage where the generics may go from the outgrowers to the undergrowers versus the market? Or do you think that only you will succeed?

**Saori Dubourg:** What we tried to show you is that we have seen a trend where generics over the years were growing a little bit faster than the classical innovators. But, given the framework conditions changing so much now – volatility, weather, the crop protection portfolio is being much more regulated – there is a unique opportunity that this will now shift in the market. This is why the innovators across the board are more confident of gaining market share, because it is simply about an innovation play.

The challenges are multiple in order to capture them. You saw this in the pipeline of Peter as well as in the crop system approach that Vincent showed. It is getting a very professionalized business where you need technologies. This is where I think there is a game change.

**Vincent Gros:** As a matter of fact, the generic companies over the last ten years gained ground. We think that the trend for the next ten years will be very different because the regulatory environment is getting more and more challenging for the generic companies. This is an opportunity for the R&D companies.

**Tim Jones (Deutsche Bank):** If you look at 2020, what is the uplift you would get for EBIT if the North American season wasn't the disaster it was this year? If you just give us a rough number.

**Vincent Gros:** Honestly speaking, it is a little bit too early to speak about the season 2020 in North America because we want to see the product-on-the-ground figures.

This is something which will be available in October. Based on that, we will have a much more accurate view on what is possible to do.

But we expect that the extreme weather conditions we faced in 2019 will not repeat in 2020.

**Tim Jones (Deutsche Bank):** Maybe if I rephrase the question: If you look at your budget for 2019 which, I presume, in January has seen the normal weather and what came out, how much did you lose in North America because the weather was really bad?

**Vincent Gros:** Our volumes are significantly below 2018. I am speaking about our legacy crop protection business. But what matters to us is more the product-on-the-ground picture because, as already said, we have decreased our inventories significantly both in Canada and in the US. We expect that we didn't lose ground, that we didn't lose market share at the farmers' level in North America.

**Matthew Yates (Bank of America Merrill Lynch):** I would like to just ask about the market share assumption and the ability for you to outgrow the market. You have shown on a slide that you are number 3 or number 4 in this industry. There are other companies out there with more scale in distribution, with broader product portfolios and, arguably, next year will begin to be more aggressive in cross-selling those portfolios, given the consolidation that has happened. So, why is it that you are going to gain share and not actually lose share?

**Vincent Gros:** This is mainly driven by our future and existing pipeline. What are our key growth levers? The growth lever number 1 is the new hybrid wheat technology. Here we are speaking about a blue ocean; it is pure incremental business. We have no business in this segment so far. By developing this technology, we will have a direct effect on our market share.

Then it is also driven by our insecticide new active ingredients. We have a very low market share at the moment. So, this will be mainly also incremental business and more market share to gain.

The third lever are our new soy traits, a very profitable business. We are almost not present in the segment at the moment.

So, if I look at our pipeline, this will trigger a lot of net incremental sales and this is why we believe that we have a very good chance to achieve our market share growth.

**Matthew Yates (Bank of America Merrill Lynch):** Just a quick follow-up: Are you budgeting any share loss on LibertyLink from the launch of Xtend?

**Vincent Gros:** Of course, that's something we are investigating. Our competitors are launching new technologies, and this is something which is fully integrated in our strategy, of course.

**Christian Faitz (Kepler Cheuvreux):** On Matthew's LibertyLink question: Can you talk about the performance of LibertyLink this year, maybe trait and glufosinate ammonium separately?

Legacy Bayer was not exactly known for having reinvented the wheel in digital ag. So what has changed since you got that asset? Have you brought any BASF-own technologies into xarvio e.g.?

**Vincent Gros:** Regarding our glufosinate ammonium (GA) business, this has been, of course, impacted by the very challenging business environment in North America because this is where the sales are happening. But it's a contrasted picture. In Canada, we have increased further our market share in the canola seed segments, and this led also to increased sales of GA.

In the US, again a different picture because of the weather conditions, because of the very compressed season. It's a matter of fact that we are undergoing also an increasing generic pressure in this segment and this is also something we are looking at and we are implementing measures to defend our market share and to make sure that we have a volume strategy.

On xarvio, my proposal is that you address this question during the breakout session because we have Tobias Menne who is coming from Bayer and who is now fully part of the family and, I think, is the best one to answer that interesting question.

**Saori Dubourg:** I think there are various factors he will show of combined eco systems and business models that are different, significantly different.

**Christian Faitz (Kepler Cheuvreux):** Second question: Short Stature Corn. When Bob Reiter presented this at the Bayer CMD, he presented this very much as a Bayer/Monsanto baby. You mentioned that your economic interest is 40 percent essentially.

**Dr. Peter Eckes:** This is correct. I think those that have been following us for a while know: The commercial terms have not changed. 50 percent of the investment is on BASF's side and 40 percent of the residual trade value.

**Christian Faitz (Kepler Cheuvreux):** Yes. And here we are talking about 2030 or something, right?

**Dr. Peter Eckes:** You probably have asked that question Bob Reiter and he gave you the perfect answer.

**Peter Clark (Société Générale):** On the EBITDA growth target, the 5 percent on average: If you are looking at growing a premium of 100 basis points, you have maybe 4 percent. So you are looking at another 100 basis points on that in terms of the EBITDA. By my calculation, your sort of cost synergies, efficiencies pretty much would get you that on a ten-year view. So why is there not more ambition in where you take the margin?

**Vincent Gros:** Because we want to make sure that we achieve our targets. When we meet again, we will show you that we are very much on track. But yes, I am with you: Those are achievable targets.

**Andreas Heine (MainFirst):** The first question is on this digital platform. In completely other markets, we learned, basically the leader takes all. In digitization, you are probably not the leader. So how do you see the risk that the leader takes, let's say, 80, 90 percent of the market because farmers will not have all the different apps which are available on their iPad?

The second one: A little bit more on these fungus traits you have in the soybean. I was only aware of two mechanisms in the market, the insecticides and the herbicides. That seems to be new. But whenever asked about this, it was said that the fungus change so fast in their generation that it is basically almost impossible to come up with a trait in an area where resistance might start immediately.

**Saori Dubourg:** On digital ag, maybe just a short answer because we will have the session later on. It's not about just taking all the data. We have to look very specifically into the applications. For example, if we talk about diseases, we have quite a big know-how in that area that is unique.

So it's not that everyone has the same. There are distinct differences of what kind of platforms are created. We have a wide network of partners also that we are collaborating with, which will expand the access to customers. That is what Vincent talked about. So, that's why we are very confident; the access to the customers only in this year has quadrupled. So we have really seen a very high offtake of this.

And you have to look at it application-wise. It's not just that everyone has a weather app and shows you how to apply different fungicides or herbicides. It's really driven by applications.

**Dr. Peter Eckes:** On fungal-resistance traits, this might now be a little bit technical. But you are absolutely right: I think a key is in the design of how we go for a trait, that we think about how we can make it sustainable.

What we have in the discovery strategy is not looking at one gene but combining multiple genes with different modes of actions to actually achieve a lasting effect. So, basically, what you need is to ensure from the get going that you have multiple modes of action to prevent that this is falling down.

And – I think this is a part why we are excited – it's a solution approach. It's not one or the other, it's not just trait or chemistry. The secret is that this basically will be developed as a holistic system. Yes, you can only manage disease if you actually have, I say, rotation and additional traits.

This is actually for five years of field data. We have not seen any resistance. The results are getting better year on year. When we do the same thing with chemistry, with just one mode of action, we would usually already see first signs of a resistance. In that respect, it's good.

And then you have to make sure that you stay up to date. So, I think what you see with herbicide traits, what you see with insect traits is also that, basically, we are opening a new field. Coming back to what Vincent said: Again, this is also why we are optimistic that this is adding at the end to the topline.

**Lucian Peppelenbos (APG Asset Management):** You clearly state how your R&D pipeline is aligned with sustainability objectives. In your current portfolio, you have some products subject to controversies and regulatory pressure, like fipronil and dicamba. So what is there in your portfolio to substitute these products and when would you expect these to come to market?

**Dr. Peter Eckes:** Let me start by saying how we actually approach R&D today. If I look over the last 15 years, one of the fundamental changes – you will hear more later on in the breakout session – is that from the get-going, instead of just screening performance, you really actually screen performance and at the same time you look at the side effects. So, this has fundamentally changed the way that we are doing the research.

In that respect also, I am very optimistic that pretty much anything that we will put into the pipeline in the future will be Accelerator sales. In that respect, also coming to a point that Vincent made: This helps us really to contribute to BASF's Group achievement to get to the sales. I think this is a fundamental way.

Now, it doesn't happen overnight – that is clear – because, yes, the R&D times are considerable in our industry. But I would say, with the concept we have been well ahead in the industry, we have been really at the lead to do this early on. I think we are in a pretty good position.

**Chris Counihan (Credit Suisse Securities):** On the R&D side, you present, I think, the 6 billion euros of new sales pipeline opportunity. Could you maybe talk about what your assumptions are either on cannibalization of existing products or existing products actually rolling off? That's question one.

Question two is on the customer focus now. What proportion of your business is sold through distributors? How will you act to make sure that you do not marginalize them through this focus?

**Dr. Peter Eckes:** I think Vincent has pretty much covered a lot of the aspects already. If you look at the different areas: The wheat part is overall on top. If you look at insecticides, anything that we bring to the market will be on top. In fungicides, it's a balance, as Vincent has described. And in herbicides, as soon as we combine things with a trait, we actually really open up also new markets. Again, it's a balanced picture. You have to look at it indication by indication here.

**Vincent Gros:** Thank you for the question regarding the market approach. What is changing in BASF already today and what we continue to change is what we call demand creation. Demand creation is something different than: Whom do we invoice?

The most important thing for us is to be able to understand the farmers' crop systems and how we can meet their needs and their expectations. Here, we are investing a lot.



We are creating the demand, e.g., in Eastern Europe very strongly. The same approach we have in North America and in Latin America. But the distributors are and will continue to be our partners. Then the picture differs from one country to another.

The only thing we are making sure is that there is no overlapping between what the distributors are doing and what we are doing.

**Saori Dubourg:** Just to add to this thought of a crop system, that you know what this means for a farmer, from a farmer's perspective: We had some press discussion on Monday already where this question was asked. With the combined technology of agronomic advice, different technologies, different products, you can really optimize the yields on the ground. So we have examples in North America that go from times two up to times five – five times optimized yield, depending on how you apply the different elements. This is where the beauty is. This is also partially one of the answers of how we apply e.g. digital., which makes it different. So, it's an integrated approach of different technologies that might make that difference.

**Chetan Udeshi (JP Morgan):** Can you talk about the regulatory scrutiny the industry is getting these days? Just recently, there was news about one of the fungicides in France being banned and you are the biggest producer. How have you taken that into account in your targets? That's question number one.

Question number two, this whole digital: It seems every month there is some digital offering in ag these days. Yara has one, Nutrien has one. Bayer has one. You guys have one. Who is going to win? And how are you taking that risk that eventually there are going to be more losers than winners in these digital offerings?

**Dr. Peter Eckes:** It is pretty much certain that regulatory demands will increase. I think this is something that we have to bet on. It's pretty difficult to predict how because there are also regionally differences. Basically, you have different demands in Europe versus North America.

But at least for me personally it's an opportunity because it will require innovation. Setting up your R&D to make sure that you can have an advantage out of this, I think, this is, from my viewpoint, really key for us. This is where we have invested. That's where I feel very good.

**Saori Dubourg:** Building on what Peter said: What you have seen in the pipeline, we have actively decided to build sustainability into everything we do, including the R&D pipeline. So that will lower the risk of regulatory hurdles. And we have proven with Revysol as a platform that we have the tools for it.

Second: We asked two years ago 9,000 experts around the world, globally also for BASF: What are the upcoming trends from NGOs, society, politicians? So we have a lot of data on each industry. We can at least foresee a few things that will come up.

One topic that has just recently been discussed at the G7 was biodiversity. So we are preparing for that. We have all kinds of collaborations. It's not only product-related. It's also building these farm collaborations. The customers acknowledge our know-how in this sector.

Thirdly, I am personally a lot in the EU Commission, talking to the different parties. What is really missing is a scientific understanding. There is a lot of emotional discussion going on. This is certainly something that applies to the entire industry. It's not only agriculture. It's going across all industries at this point in time. You saw it in other industries as well where emotion is going over board, singular topics are picked up, then hyped and nobody is talking about facts and real numbers.

So, at the moment, what we see: CO<sub>2</sub> and circularity are two big topics, but we have made an in-depth analysis of the trends and when they evolve. So we have many details on that. Based on this, we have embedded some of the actions already in our portfolio. Climate change-related weather impacts will be something that will come up and that's why I am very proud that we have a lot of knowledge on this.

As I said, the advantage of BASF is: We have 8 million data around every single country, knowing what is the impact of greenhouse gas, related to all kinds of factors, and we have the input factors. This is something we could use when we discuss with customers about how they can make an impact on their farm.

**Vincent Gros:** If I may add something: We are very much welcoming regulations that are science-based. But we are very worried to see this increasing mistrust or distrust in science and that the regulatory decisions are more and more driven by political considerations. For a company like BASF, this is not easy to anticipate. But we are prepared for that and we are thinking about ways to create the conditions for a more balanced debate on innovation in agriculture in particular.

**Saori Dubourg:** Part of the solutions is our dialogue, e.g., with stakeholders. Vincent and the whole team have entertained public dialogues with NGOs, politicians and the industry together, talking about how we solve the challenges and not only divide. So, this is part of what we have to change as an industry.

**Vincent Gros:** Coming to your second question on digital: You are absolutely right, there are a lot of players and there will probably be less winners at the end of the day.

We believe that in BASF, with this integration of the xarvio platform, we have a couple of key competitive advantages and we are well ahead of a large number of players. But at the end of the day, I think, the key success factor is to establish the right partnerships. There is no company in the market today, even the biggest one you have in mind, that has all the solutions in its hands.

And we want to be very smart here in BASF. You heard what we are doing with Nutrien for example. We have also very interesting partnerships with machinery companies to develop new tools like smart sprayers. This ability to develop the right partnerships for me is the key success factor.

**Sebastian Bray (Berenberg):** I had a question about the margin target, 500 to 600 basis points of improvement. BASF's margins in agriculture in the past have tracked farmer incomes in the US quite closely.

BASF was spending a lot on R&D and innovating quite well four or five years ago in this area without the benefit of having to buy a seeds portfolio. What convinces you that this relationship can be uncoupled and that there can be a margin recovery without a recovery in farmer income?

So, I guess, what I am getting at is: Given farmer incomes are on their all-time lows, what convinces you that there is appetite for this innovation?

**Dr. Hans-Ulrich Engel:** We find ourselves obviously right now in a rather difficult environment. Sebastian, in your question you alluded to the significant challenges that we faced in North America in this season. I think, while Vincent was careful with giving you an idea there, that's clearly a low triple-digit million-euro figure that we are talking about in North America.

On top of that, in 2019, we are faced with integration costs. Not all of that is running through the special items. A good part of that also sits in the underlying operating performance. We will be through that in 2019. So we will get the clean bill of health into the year 2020. That alone should give us a margin improvement.

What farmer income will do in the US, I cannot tell you. I cannot predict this, but for planning purposes we have used an environment that looks more like the years 2016 and 2017 and not like the very difficult years 2018 and 2019 that required significant amounts of subsidies. That all should help to get us back to 23 percent, which should be very well achievable with the portfolio that we are currently having.

**Dr. Peter Eckes:** Maybe I add on the innovation piece and the appetite for innovation: Many of you have been tracking us for multiple years. If you look at the launches here, I think, there are really more launches that are now starting... We talked extensively about Revysol, we talked extensively about Inscalix. This has an impact. It is an industry where farmers – because of regulatory scrutiny – actually substitute products that comply better with their needs. This is the piece that is an important part of the equation.

**Charlie Webb (Morgan Stanley):** Maybe some clarification questions: Around the integration process with Bayer, I am just thinking about what service agreements you still have in place with Bayer that perhaps are going to roll off. Is that incorporated in the synergy target you have set out in terms of a mid-triple-digit million number? Can you give us any sense how much that is and also in what timeframe you try to internalize that what you currently use Bayer for?

Secondly, coming back to the efficiency of R&D: I can understand why customers want your offering and why the pipeline is very exciting. But their willingness to pay for that has obviously been tough. We have touched upon that farmer profitability is perhaps the reason behind that.

What assumptions do you take on that pipeline in terms of customers' willingness to pay for innovation looking forward? Are we talking about an environment that is more like 2016/17 versus 2018/19? To know what assumptions are going into that would be helpful.

**Vincent Gros:** Regarding the integration and the synergies: The figures I have mentioned in my presentation are 100 percent driven by cross-selling synergies and also by the development of new products, new formulations based on active ingredients we have acquired from Bayer and that are very complementary with our own active ingredients.

When it comes to our commitments post closing, there are still some things to do to disentangle BASF from Bayer. When it comes, e.g., to the production of some active ingredients, we are relying still on Bayer's supply at the moment, but this has to change and we have very clear milestones for that.

Regarding our ability to create value out of our new active ingredients or our new traits or our new seeds: You are right, the low commodity prices are increasing the pressure. But if we are able to show evidence that our products are solutions, are increasing the profitability of the farmers, then, without being naïve, the price tag itself is not a problem per se. It's really about our ability to show what our technologies are bringing in terms of profitability at the farmer's level.

**Dr. Peter Eckes:** I think we really take a great deal of care to make sure that there is a very strong link between R&D targets and what we think is achievable in the market.

For each of these areas, we define, to the best we can, what the value propositions are and then match basically the way we screen, and we develop with this. Things are changing, particularly when you think about the long timelines. But I think there is, I would say, a culture where we take this. It's not just: Let's screen and see what interesting things we are getting out of that. I think this is something that has been a stronghold and has changed and, I would say, professionalized how we have been doing things over the last decade. I think you will see that nicely later on in the breakout.

**Saori Dubourg:** We had a conversation with farmers last Monday, just this week. Profitability is one aspect, but if I stand in front of a field of weed that is growing like hell, in terms of things that you don't want to have in a field, and it's growing very fast ... We have seen a couple of farmers who had zero income because the resistances are increasing very rapidly at this point in time.

So this is why Vincent is right: The closeness of and the collaboration with R&D is pretty extensive, but if you have a choice between a whole field that you have to erase – that's what we have to actually do if this pops up – and something that really helps you, it's pretty clear that you need good agronomic technologies and advice.