

## Health & Crop Sciences Sector

### Business Strategy Meeting

#### Q&A Summary

Date: Friday, September 19, 2014, 1:30 to 2:45 p.m.

Presenter: Ray Nishimoto, Director and Managing Executive Officer

#### <Performance Trends>

**Q. What is behind the major improvement in performance of the Health & Crop Sciences Sector these past couple of years?**

A. Sales growth of the soybean herbicide Flumioxazin has been a very large driver. And much of this success is due to our alliance with other firms like Nufarm and Monsanto. Not just Flumioxazin but our crop protection business as a whole has been sustained by growth in demand mainly outside Japan, with each of our products showing increased sales these past few years. The weakening of the yen versus other currencies since 2013 has also contributed to our performance.

**Q. The global market for crop protection chemicals has grown thanks to population growth and the rising agricultural commodity markets, but these markets started to turn downward last year. Is this worsening of the agricultural commodity markets a factor behind the relatively weak performance in the first quarter of this fiscal year?**

A. The agricultural commodity markets had very little impact, but the abnormal weather was a big factor. While there is a general tendency for farmers to cut back on purchasing of agrochemicals in a market downturn, currently we see no direct impact from the agricultural commodity market situation. The weak performance in the first quarter was due to a temporary factor: abnormal weather in North America and Brazil.

**Q. Looking just at the agrochemicals business, what percentage of net sales is from outside Japan? Also, to what extent are you impacted by exchange rates?**

A. Our crop protection chemicals business is divided between the Crop Protection Division - Domestic and the Crop Protection Division-International, and sales outside Japan are about two-thirds of the combined total of both divisions. The Crop Protection Division - Domestic procures some products and raw materials from outside Japan, and in this case a weak yen reduces profitability. For the Crop Protection Division-International, on the other hand, as the yen weakens it causes profits to rise, since this division depends on exports. For the Health & Crop Sciences Sector as a whole, a one yen change in the yen/dollar rate has an impact of around 500 million yen to annual operating income.

**Q. What is the situation for products other than Flumioxazin?**

A. The product that has the second biggest sales next to Flumioxazin is the insecticide Clothianidin. Sales of Clothianidin are partially restricted in Europe pending examination of the environmental impact, but in the United States sales are up sharply not only for seed treatment use but for ordinary spraying applications. Meanwhile, sales of the fungicide Sumilex® have risen in Brazil because of the large outbreak of soybean white mold there. While these three products are our main profit drivers, as sales of our longstanding insecticide product, such as Sumithion®, have also been rising steadily, shipments of agrochemicals across the board have grown.

**Q. Is there no impact from the restriction on sales of Clothianidin in Europe?**

A. The impact on performance is very limited, since sales of Clothianidin in Europe represent only a small share of our global agrochemicals sales.

**Q. What will drive profits in the agrochemicals business over the next three to five years?**

A. Future profits will be driven by business expansion mainly outside Japan. While there are expectations for growth in new platforms, such as the seed treatment and post-harvest fields, the biggest driver will be growth in Flumioxazin sales.

**Q. Over the next three to five years, what is your view of possible risks from stricter regulations, patent expirations, and climate?**

A. There are always climate risks, but I believe the biggest risk is from trends toward stricter regulations. The market timing of competing products can be predicted from the product pipelines of rival firms, but predicting regulation trends is often difficult. If regulations in Brazil were to become like those in Europe, this could have a big impact not only on our company but on agrochemicals manufacturers as a whole.

**<Flumioxazin>**

**Q. What is the patent term for Flumioxazin?**

A. The compound patent on Flumioxazin molecule has already expired. In the United States, without regard to when a compound patent expires, exclusive use of the registration data can be extended for up to additional three more years to a regular exclusive use period of ten years, if applied and approved, but this period has also ended. By entering into long-term partnership agreements with Monsanto to the extent possible, we are aiming to maintain competitive advantages over generic manufacturers entering this market. In the United States the agreement term was through 2017, but we have extended this to 2020. Our agreements in Brazil and Argentina are also through 2020.

**Q. Sales of Flumioxazin in fiscal 2013 were 30 billion yen. When do you expect them to reach 40 to 50 billion yen?**

A. In fiscal 2015 we will be increasing our capacity and hope to achieve sales of 40 to 50 billion yen in 2016-17.

**Q. Why was the agreement term for Flumioxazin extended from 2017 to 2020?**

A. Besides there being no generic versions of Flumioxazin on sale at the present time, that the alliance has yielded benefits up to now was a factor in the extension. The technical and other cooperation with Monsanto has produced results, and our company is contributing to maintaining the effectiveness of the Roundup® system, furthering mutual trust. For these reasons, when expanding the regions of the alliance, the agreement term in the United States was extended to 2020 as in Brazil and Argentina.

**Q. Is there no change to the Flumioxazin sales target of 40 to 50 billion yen as a result of the agreement extension?**

A. We had already expected sales of 40 to 50 billion yen, but the extension of the agreement diminishes the risks.

**Q. What are the shares of Flumioxazin sales in each region?**

A. The current sales ratios are 60 percent in the United States and just under 30 percent in Brazil. We would like to increase sales in Argentina, where we just started selling it through the alliance last year.

**<Nufarm>**

**Q. As the generic market expands, do you believe your present capital arrangement with Nufarm is the most appropriate? How will you deal with generic brands?**

A. Our business arrangement with Nufarm is a complementary one, having invested with the expectation of synergistic benefits. With the exception of Flumioxazin, most of our chemicals are essentially aimed at specialty crops. Nufarm, on the other hand, is a company centered on widely applicable herbicides. While there is some overlapping of sales networks in North America and Western Europe, this partnership has so far gone well, with Nufarm filling in areas such as Brazil and Eastern Europe where we were weak, and we can expect further benefits in the future. To provide solutions to farmers in world markets, we need to have a lineup that includes widely applicable products, not just patented ones. Nufarm being a publicly traded company, there are limits to what we can say here about the future, but if you were to say our investment will never be more than 23%, I would hope that it could somewhat higher at some point in the future. For the time being, however, we will maintain our present capital relationship and focus on the goal of expanding the synergies.

**Q. What kind of timeframe do you have in mind for realizing synergies?**

A. Slide 25 assumes that short-term benefits will be realized within 2 to 3 years from the start of the partnership, medium-term benefits in 4 to 5 years, and long-term benefits after that.

**<Biorational, seed treatment, post-harvest>**

**Q. Recently you invested a large amount of money in a new biological pesticides plant in Iowa. Does this have future potential? Please tell us a bit more about biorational products, including plant growth regulators.**

A. Biological pesticides cover various fields, but our company handles BT (Bacillus thuringiensis, a bacterium) pesticide. While Chinese companies have also entered the market, our BT pesticide business was purchased from Abbott Laboratories. Our BT pesticide is of high quality, and has the top share globally. In the field of plant growth regulators, gibberellin (a plant hormone) is one of our main products. Besides its use with fruit trees and vegetables, lately it is being used with corn and other grain crops, and sales are growing in many countries in the world.

**Q. How are global sales in the biorational field?**

A. Right now they are around 20 billion yen a year, and in the next few years we expect to double that.

**Q. What are the future prospects in the seed treatment and post-harvest fields? Seed treatment is a large market. How do you plan to expand business in it?**

A. The seed treatment market is growing 10 percent annually. As a latecomer to this market, our sales in this field are still modest. It should be relatively easy for us to expand business in this field, by marketing Clothianidin, the fungicide Ethaboxam, and, as a new product, the fungicide Mandestrobin.

In the post-harvest field our sales are around 6 billion yen, with the main customers being packing and storage firms. In addition to chemical agents for post-harvest use, we market and sell systems for implementing post-harvest processing on produce (for example, a system for sterilizing and washing apples and applying chemicals). Up to now our business in this area has been focused on the United States, but because of the strong needs we plan to expand business in Brazil and other countries as well.

**<Development of new compounds>**

**Q. Could you give us some details about next-generation blockbusters?**

A. Of the compounds that are being positioned as next-generation blockbusters, we have three fungicides, one insecticide, and one plant growth regulator. As for insecticides, multiple products can be developed from one compound, and there are compounds expected to have wide application from major grain crops to specialty crops, so we see large profit potential. Of these compounds, one insecticide and one fungicide are novel compounds having new mode of action.

**Q. On what kinds of crops will the next-generation blockbusters be used?**

A. These are compounds targeting not one crop but a wide range of crops, from soybeans and other field crops to specialties such as fruits.

**Q. Won't the next-generation blockbusters compete with Flumioxazin?**

A. They each have different fields, such as insecticides and fungicides, so they will not be competing.

**Q. Will there be no new compounds released during the period from 2016 to 2019?**

A. Slide 34 shows the years when the new compounds will be released to their initial markets. The fungicides Ethaboxam and Mandestrobin are expected to be launched in 2014 to 2015. Given our business scale, we cannot bring them to market in all parts of the world at the same time, so they will be launched sequentially to different countries. The compounds released on their initial markets in 2015 will be launched in other countries starting in the following year, and sales will be expanded.

When there are no new compounds ready for the launch, our approach has been to increase sales of existing compounds through business alliances and development of new applications or formulations through product life cycle management, while preparing ourselves to bring the next new compound to launch.

**Q. The handout at the November 2013 management strategy meeting said new compounds would be marketed in 2016 or later, but this time it has been changed to 2020 or after. Has development of new compounds been delayed?**

A. The new compounds you are talking about were always planned for 2020 or later, but we revised the material this time to make clear the timing for bringing them to market. Development of these new compounds, far from being delayed, is actually ahead of schedule.

**Q. Sumitomo Chemical is Japan's largest crop protection chemicals manufacturer, and ranks 7th or 8th globally among agrochemicals companies which discovers and develops new products. As major overseas corporations are struggling to develop new compounds, how is it that your company and other Japanese agrochemicals manufacturers have good pipelines? Is the ability to discover and develop new compounds unrelated to company size?**

A. I honestly don't have ideas for the exact reasons, but even leading agrochemicals manufacturers often remark about how Japanese companies manage to bring out so many new products relative to their size. Still, even if a Japanese company manages to develop new compounds discovered in its R&D capability, without a global sales network it will have to depend on major multinational companies for its overseas sales. Major manufacturers have extensive lines of crop protection chemicals, so even if we ask them to sell our product, it will be only one of many in their lineup. Our company uses our own global sales network to sell the agrochemicals we discover and develop ourselves, and it is this in-house development and sales capability that drives profit growth. We got where we are today by establishing Valent USA Corp. 25 years ago and working hard to expand outside Japan.

<Other>

**Q. How will you respond to the spread of GMO (genetically modified organisms)?**

A. As shown on Slide 14, in 1996 after Roundup Ready® soybean seeds went on sale in the United States, for a time there was a drop in use of herbicides, sales of which had been growing up to then. After that, BT cotton (cottonseeds genetically modified to produce *Bacillus thuringiensis*, a bacterium that produces controlling insects) and other genetically modified seeds were put on the market, and their sales have been expanding, but since the start of this century sales of chemical crop protection products have been growing as well. Besides the issue of weeds and pests developing resistance to crop protection mechanism by GMO, there is a strong desire, especially in Brazil, to raise the productivity of farmers so as to increase harvests, resulting in increased use of chemical crop protection products that complement GMO. I believe these two trends will continue.

**Q. Does this mean that GMO and chemical crop protection products will coexist and grow together?**

A. Yes, that would appear to be the case.

**Q. Some concerns looking ahead are that global warming will lead to changes in planted crops, and that the TPP could mean fiercer competition among rival agrochemicals manufacturers. What do you see as the impact on domestic business, and what is Sumitomo Chemical doing about it?**

A. As noted in the explanation of the structural changes in Japan's agriculture, changes to the existing co-op and private distribution channel structures, as well as changes in crop cultivation, will impact our company and agriculture-related materials manufacturers as a whole. For our part, we are developing technologies and products that anticipate these changes, seeing them rather as business opportunities.

**Q. Are you aiming to enter the seed marketing business using the rice business as a starting point?**

A. The plan is to expand our business into a total package, where we sell seed rice, have agriculture companies and other growers use our fertilizers and materials to cultivate rice, and then we purchase, pack, and sell the harvested rice.

**Q. Do you have any plans to expand overseas the rice business developed in Japan?**

A. At present our priority is expanding our domestic production to 10,000 hectares, but among the assets we have purchased recently are some with the potential for overseas expansion. If we look ahead ten years from now, the possibility of expanding rice business beyond Japan does exist, and it is a challenge we would like to take up.

**Q. Japan will be introducing regulations on crop protection chemicals based on acute reference dose (ARfD). How will this affect your business?**

A. I don't see any major impact on our company.

### **Forward-Looking Statements**

Statements made in this material with respect to Sumitomo Chemical's plans, projections, strategies, and beliefs that are not historical facts are forward-looking statements about the future performance that were calculated based on information available at the present time and include risks and uncertainties. Factors that could materially affect actual results of Sumitomo Chemical's future performance include, but are not limited to, economic conditions in the areas of Sumitomo Chemical's business, changes in demand for Sumitomo Chemical's products in markets, downward price pressure on Sumitomo Chemical's products resulting from intensifying competition, Sumitomo Chemical's ability to continue to provide products that are accepted by customers in highly competitive markets, and movements of currency exchange rates.