MANAGEMENT DISCUSSION & ANALYSIS REPORT

1. OVERVIEW OF INDIAN AGRICULTURE

Indian agriculture is the second largest employer in the world with 265 million Indians engaged in farming. In rural India, 60 percent of the workforce works in farms and depends on agriculture as the only source of livelihood. India is currently among the two largest producers of major agricultural commodities such as rice, vegetables, fruits, cotton and sugar. Agricultural export constitutes 10 percent of India's exports and is the fourth-largest exported commodity. With a contribution of roughly one-fifth of India's gross value added (GVA); agriculture is an important contributor to the growth of the Indian economy.

India has 157.35 million hectares under cultivation, which makes it the second largest holder of agricultural land in the world. All 15 major climates of the world exist in India, with 20 agri-climatic regions in total. Smallholders or small farmers make up 80 percent of India's farmer base. As families grow, the size of small landholdings will shrink further. That is why any meaningful solution to solve problems in Indian agriculture needs to revolve around targeted support for smallholders, through contemporary crop protection solutions, high yielding seeds and modern breeding methods.

Food Grain Production in 2017-18

In 2017-18, India's food grain production is expected to reach 277.49 million tonnes, which is 2.38 million tonnes higher than the previous record food grain production of 275.11 million tonnes in 2016-17 *(Source: 2nd Advance Estimates for 2017-18, issued by the Ministry of Agriculture & Farmers' Welfare)*.

The production of rice increased by 1.31 million tonnes in 2017-18, compared to 109.70 million tonnes during 2016-17. It is also higher by 4.71 million tonnes than the five years' average production of 106.29 million tonnes. Production of wheat is estimated at 97.11 million tonnes, which is lower by 1.40 million tonnes as compared to record wheat production of 98.51 million tonnes achieved during 2016-17. However, the production of wheat during 2017-18 is higher by 3.77 million tonnes than the average wheat production.

Production of coarse cereals is estimated at record 45.42 million tonnes, which is higher than the average production by 3.72 million tonnes. Further, it is also higher by 1.65 million tonnes as compared to 43.77 million tonnes achieved during 2016-17. Total pulses production during 2017-18 is estimated at record 23.95 million tonnes which is higher by 0.82 million tonnes than the previous year's production of 23.13 million tonnes. Moreover, the production of pulses during 2017-18 is higher than the five years' average production by 5.10 million tonnes.

Total oilseeds production in the country during 2017-18 is estimated at 29.88 million tonnes, which is lower by 1.39 million tonnes than the production of 31.28 million tonnes during 2016-17. However, the production of oilseeds during 2017-18 is marginally higher by 0.34 million tonnes than the average oilseeds production.

Production of cotton is estimated at 33.92 million bales (of 170 kg each), which is higher than the previous year's production of 32.58 million bales. Further, it is also higher by 0.41 million bales than its average production of 33.50 million bales.

Government Initiatives

Given the importance of the agriculture sector, the Government of India, in its budget for 2016, announced several steps for the sustainable development of agriculture. Key among these initiatives was the ambitious goal to 'Double farmers' income by 2022. For this, the government commenced various schemes around irrigation, soil health management, organic farming and crop insurance. Some of the existing schemes were amplified further in 2017-18.

In the Union Budget 2018-19, the government increased the budgetary allocation for the Ministry of Agriculture & Farmers' Welfare to ₹ 58,080 Crores from ₹ 51,576 Crores in 2017-18. The government has been pushing for the implementation of schemes that will shift India's priority from production-led farming to income-led farming. To achieve the ambitious objective of Doubling farmer's income by 2022, the government is encouraging to adopt a 'multi-dimensional seven-point strategy' which includes:

1. Emphasis on irrigation along with end-to-end solutions towards creation of resources for 'Per Drop More Crop'
2. Provision of quality seeds and nutrients according to the soil quality of each farm
3. Large investments in warehouses and cold chains to prevent post-harvest losses
4. Promotion of value addition through food processing
5. Implementation of National Agricultural Markets and e-platforms (e-NAM)
6. Introduction of crop insurance scheme at a lower cost
7. Promotion of allied activities such as Dairy-Animal husbandry, Poultry, Bee-keeping, Medh Per Ped, Horticulture and Fisheries

The Pradhan Mantri Fasal Bima Yojana (PMFBY) is one such initiative towards crop insurance with the lowest-ever premium rates for farmers. PMFBY has many firsts to its credit such as national coverage of post-harvest losses due to inundation and unseasonal rains, no capping on government subsidy, and use of technology for early and accurate settlement of claims. Assistance to farmers afflicted by natural calamities has been increased by 50 percent and eligibility norms have been relaxed. As announced in the Union Budget 2018-19, the implementation of PMFBY will be made faster and the government is aiming to increase the coverage under the scheme to 50 percent of gross cropped area in 2018-19.

Issue of Soil Health Cards to 14 crore farm-holdings by March 2017 is another good initiative and will result in judicious application of fertilizers, lower input costs and better soil health. Other initiatives such as the Prime Minister Krishi Sinchai Yojana (PMKSY)/ 'Per Drop More Crop' and 'Jal Sanchay for Jal Sinchan' assures better irrigation to expand cultivated areas by improving water use efficiency and enabling drought-proofing.

The National Agriculture Market Scheme (NAM) which was launched to connect mandis across the entire country is helping make India a 'One Food zone, One Country, One Market.' This will immensely benefit farmers in getting fair and remunerative prices.

2. INDUSTRY DEVELOPMENT

The south-west monsoon, which delivers about 70 percent of India's annual rainfall, is critical for the farm sector. The India Meteorological Department (IMD) had forecasted a normal monsoon for 2017, but actual rainfall was below normal to the tune of 95 percent of the long period average (LPA). The intermittency, pan-India rainfall coverage and distribution of monsoon left the farmers in a difficult situation. Dry spells in the key monsoon months of August and the first-half of September affected the consumption of crop protection products.

Further, the GST (Goods & Service Tax) implementation post July 2017 brought in some uncertainties among trade and expectations of cost increase for farmers. However, the situation normalized by end of 2017. All these volatilities during the main season led to build-up of channel inventories. The crop protection industry recorded small single digit growth (without considering the impact of GST). Herbicides out-performed average market growth due to increased demand in sugarcane, corn and wheat. Fungicides on the other hand distinctly under-performed the average growth mainly due to lower cropped area and low commodity prices for vegetables.

In 2017, there were many acquisitions and divestments in the global seed industry, along with some in-depth restructuring. In the past year, a new breeding technique, represented by CRISPR boomed worldwide. Of late, Seed Technology is more focused on abiotic and biotic stress related traits to provide quality products and address adverse climatic conditions causing losses to farmers. The past 50 years have seen many research-driven improvements in seed genetics and technology that have been responsible for dramatic increases in crop productivity worldwide. Technologies such as marker assisted breeding, biotechnology and genomics have become quite mainstream. For the Seeds industry, the focus continues to be on greater efficiencies and lower input prices, safer growing conditions and safer foods and reduced environmental and ecological impact of crop production.

In 2017-18, the Seed market bounced back to normal levels with a growth of mid-double-digit over 2016-17. This was driven by stable commodity prices in cotton and timely onset of monsoon in the Western and Southern parts of India. Rice acreages under the 'fine-grain' category increased in Northern India due to better commodity prices and increase in local consumption. Delayed monsoon followed by a long dry spell impacted hybrid rice growth in Eastern India and millet acreages in North-West India. Overall, in the relevant field crops segment, the Seeds & Traits market grew by low double digits in 2017-18 compared to the previous year. This was largely driven by growth in the biggest seed markets of cotton and corn.

In 2016-17, the Company had launched PA 9072, a new short duration millet hybrid with excellent tolerance for Downy Mildew and drought. In 2017-18, Bayer initiated Project Saath-Saath to promote and establish PA 9072 among smallholder farmers' who cultivate millet in rain-fed areas. With this initiative, Bayer covered 128 villages and 500 opinion leader farmers and showcased PA 9072's yield advantage of upto 25 percent over the existing public variety HHB 67. Government officials, trade channel partners and farmers appreciated Bayer's efforts and recommended the use of Bayer's hybrid millet seed to meet the food and fodder requirement of the growers and achieve incremental income.

Environmental Science ("ES") in India, which currently operates in two business areas: Public Health and Professional Pest Management ("PPM") remained flat for 2017-18, mainly due to factors such as GST implementation, continued after-effects of demonetization and slowdown in the real estate sector. Vector-borne diseases such as dengue, malaria and chikungunya continued to affect communities across India. The Public Health market in India is driven through the practice of larviciding and space-spraying. The government and health authorities procure chemicals for larviciding and space-spraying through tenders, which is a lengthy process. But the system is slowly modernizing with tender submissions moving online and the introduction of the Government e-Marketplace (GeM) initiative. In the PPM segment, termite control, which is one of the fastest growing segments, faced a downturn with reduced pre-construction activity. Despite this, the PPM business still holds good potential for the future in both commercial and residential segments.

3. REVIEW OF FINANCIAL AND OPERATIONAL PERFORMANCE

The Company's Revenue from Operation was ₹ 27,490 Millions in 2017-18 as compared to ₹ 29,484 Millions in 2016-17. The Company reported a profit for the year of ₹ 3,001 Millions.

The Company enjoys a unique position in the market because of its capability to offer new innovative products, technologies, processes, services and business models. Innovation has always been a cornerstone in Bayer's product offerings. In the year 2017-18, the Company successfully launched five new products in Crop Protection and one new product in Seeds and Environmental Science, each.

The new offerings in Crop Protection include: Emesto Prime, a seed growth product; SIVANTO prime, Movento OD, Regent Ultra and Simbola in the insecticides category. The new product from Seeds is Arize AZ 6633, a mid-duration rice hybrid with high yield potential. The new offering from Environmental Science, Maxforce Quantum is an innovative gel bait for ant colony management.

Over the last few years, the Company is working on providing customer-centric solutions to Indian farmers by working closely with them to understand their needs even better. In 2017-18, the Company further strengthened its flagship program 'Bayer Labhsutra' which aims to increase per acre earnings and qualitative yield for the progressive farmers it targets. Bayer has extended the scope and number of demonstrations across multiple crops and geographies, but more importantly also commercialized the concept in the form of 'Labhsutra Kits' in some key geographies. As of 2017, Bayer Labhsutra demonstrations were carried out in nearly 2,000 plots.

Another key customer focused initiative; the Food Chain Partnership expresses our belief that together with our partners in the food chain we can build relationships that benefit everyone. Bayer provides farmers with innovative crop protection products, high-quality

MANAGEMENT DISCUSSION & ANALYSIS REPORT (contd.)

seeds, and services, as well as advisory on the optimal use of products and applications. Ultimately farmers benefit through better market access, more secure income, better technological solutions, higher yields and cost-effective, sustainable use of agrochemicals. In 2017-18, the Company had 53 Food Chain Partnership projects spread across 86,000 hectares covering 96,000 farmers.

Bayer has been working with smallholder farmers in India for many years and has a variety of successful programs such as Bayer Labhsutra, Food Chain Partnerships as well as public private partnerships in place. In late 2015, Bayer announced a global "Smallholder Farming Initiative" to support small-scale farmers in emerging and developing countries. The initiative was rolled out in India in May 2016 as a pilot project for green chilies in Varanasi, Uttar Pradesh. In 2017-18, the project was covering more than 250 smallholder farmers in India. After the success of the first project, a second pilot project was introduced in Jharkhand for tomatoes. The ongoing project focuses on farmers who have small land holdings of less than 2 hectares and are willing to adopt new technologies. The focus areas for the project are correct application of crop protection products, nutrient management, soil testing, drip irrigation, training on good agricultural practices, product stewardship etc.

Product Stewardship forms an integral aspect of our business operations. Every field / farm training conducted by Bayer begins with a safety training and awareness about safe & responsible use of crop protection products. Under the training programs, Bayer helps farmers learn more about identifying and purchasing authentic seeds and crop protection products, safe & responsible use of products and proper use of Personal Protection Equipment ("PPE") while spraying. In 2017, 484,680 farmers across India were covered under Bayer's safety training and awareness programs. Bayer has also started equipping each of its retail outlets with PPE kits for sale and use by spray operators.

In 2017-18, the ES unit maintained its position as the market leader in the areas of Public Health and PPM. The ES business registered lower sales by 22 percent in comparison with previous year. The major reason for lower sales was the implementation of GST which reduced revenues by 11 percent. In the PPM segment, ES sales in termite segment declined due to introduction of various legislations in the construction and real estate sector. The Company's 'Bayer Network Program', a global certification program for Pest Control Operators (PCOs), grew to cover 67 Bayer Network PCO's across 30 cities in India. However, sales from these Bayer Network PCOs declined. In 2017-18, ES continued to sponsor major symposia and seminars to promote general awareness, product knowledge, safety measures and share best practices in PPM and vector borne disease management.

4. OPPORTUNITIES, RISKS, CONCERNS AND OUTLOOK

The central challenge for Indian agriculture is low productivity, which is evident in modest average yields. According to the Food and Agriculture Organization (FAO) study, food energy requirements for South Asia will be about 2,700 calories per capita per day by 2025. In India, the current food grain availability is 525 grams per capita per day, whereas the corresponding figures in China and USA are 980 grams and 2,850 grams respectively. Due to an improvement in per capita income, if per capita consumption is 650 grams, the food grain requirement will be about 390 metric tons of food grain by 2025. Although low productivity is a challenge, it also presents an opportunity for our industry.

With key resources such as arable land, growing water scarcity and fluctuating weather patterns becoming the new normal, technology can make a huge difference. China used hybrid seed varieties to beat the climatic vagaries and achieve a turn-around in rice production. Hybrid rice seed varieties can adapt to low rainfall, poor soil conditions and can offer farmers up to 50 percent incremental yields. Despite the availability of such science-based solutions, the adoption rate for hybridization in India stands at a dismal 11 percent. This presents a huge opportunity for players in the hybrid seeds segment.

To create awareness on hybridization and the role it can play in enhancing food security, Bayer initiated 'Project Sahyog' (Hindi: collaboration) in June 2017 with small rice farmers in Motihari, a prominent rice growing region in Bihar. Project Sahyog is a joint initiative of Bayer with Indian Grameen Services (IGS) and is being implemented under the aegis of the Small Farmers' Agribusiness Consortium (SFAC). The main objective of this initiative is to sensitize farmers and officials from India's Ministry of Agriculture & Farmers' Welfare, about the potential of hybrid rice seeds to enhance food security.

Under Project Sahyog, the Company has reached out to approximately 8,000 farmers across 100 villages in the East Champaran district of Bihar and conducted Arize demonstrations and trainings on integrated crop management solutions, good agronomic practices, nutrient management and weed management. Bayer's Arize brand of hybrid rice seeds offers a broad portfolio of high-yielding hybrid rice varieties adapted to diverse field conditions and the varying needs of farmers. Project Sahyog is also being encouraged by the Hon'ble Union Minister of Agriculture & Farmers' Welfare, Shri Radha Mohan Singh.

Another significant problem that Indian farmers face is poor price realization even when there is a bumper harvest. A bumper harvest causes prices to crash and in the absence of proper storage and processing infrastructure, plenty of produce has to be sold at sub-optimal prices while the input costs for farmers keep pace with overall inflation. This creates both a debt trap for farmers and disenchantment with farming. Here too, two technology enabled solutions can help. The first calls for public-private partnerships in creating efficient farm-to-fork supply chains. The second requires crop diversification based on science and a systematic analysis of future global production trends. Intelligent diversification protects consumers from price shocks (say, a sudden surge in the price of lentils or oils when a crop fails) and allows farmers to hedge their risks.

Water is one of India's most scarce natural resources. India uses 2 to 4 times more water to produce a unit of major food crop compared to China and Brazil. Hence, it is imperative that the country focuses on improving the efficiency of water use in agriculture. Irrigation investments must shift to adopting technologies like sprinkler, drip irrigation and rainwater harvesting. In order to facilitate this shift, the new irrigation technologies need to be accorded 'infrastructure lending' status and both the center and states need to increase public spending for adoption and deployment of micro irrigation.

Addressing India's multiple challenges in agriculture requires significant upgradation of the country's national agriculture research and extension systems. India's National Agricultural Research System (NARS) comprising the Indian Council of Agricultural Research ("ICAR"), other central research institutes, and national research centers set up by ICAR, together with state agricultural universities played a key role in India's Green Revolution. However, in more recent years, R&D in agriculture has been plagued by a severe lack of investment.

Agricultural R&D is crucial to sustain agricultural productivity growth in the long-term. As per the Economic Survey, in 2017-18, the actual expenditure of the Department of Agricultural Research and Education/ Indian Council of Agricultural Research increased from ₹ 5,393 crores in 2010-11 to ₹ 6,800 crores during 2017-18. The compounded annual growth rate of expenditure has been 4.2 percent over the years, which augurs well for the industry. To ensure growth, India also needs better quality molecules, safer chemistries and a range of innovative products.

Agriculture is a big driver of the Indian economy, but the agriculture sector needs to be seen as an exciting industry rather than an industry that depends on subsidies and hand-outs. Innovation in seeds and crop protection can go a long way in addressing the productivity problems affecting Indian agriculture. It will also help farmers fetch good commodity prices which will encourage farmers to spend on qualitative inputs for achieving higher yields and a more favorable return on investment. Bayer with its product offerings, distribution reach and strong network of more than 3,500 field officers is well geared to support Indian farmers.

On the ES front, despite macro-economic shocks over the last two years, the PPM industry is expected to grow in 2018-19. The residential segment is expected to show rapid growth as consumers, particularly in urban markets, become more aware about the benefits of pest control services and start to demand safe and effective solutions. Additionally, while we expect our termite segment sales to recover, this will be closely tied to stabilization of the real-estate sector. Currently, the biggest concern for the ES business is the plethora of generics dominating the PPM segment. The Public Health business is geared for high growth with continued government expenditure to protect against vector-borne diseases. However, since a large portion of this business comes from tenders, it is difficult to achieve predictable growth.

5. CORPORATE SUSTAINABILITY

Bayer is committed to the principles of sustainable development. In this context, we are always looking for ways to enable people to share the fruits of innovation, regardless of where they come from or how much they earn.

Bayer's social commitment is based on innovation. As education is a vital factor in achieving sustainable prosperity, Bayer has been making efforts to make instruction in science and technology more attractive by way of innovative projects. In many far-flung rural areas where educational infrastructure is in a poor shape, we are supporting initiatives that focus on making school an attractive place. Skill development is also a vital part of our focus. Many of our initiatives aim to enhance skills that would help young people lead a life of dignity. Our Community Development programs being implemented across the country place emphasis on enhancing awareness about health, hygiene and skill development.

Our sustainable development initiatives are aimed at making a contribution to one of society's greatest challenges - food security. We focus on providing support to farmers in their efforts to increase yields while at the same time protecting the environment and improving the quality of life. Bayer is committed to protecting the environment and is constantly working to reduce environmental impact and find innovative product solutions that improve resource and energy efficiency.

That's what our mission "Bayer: Science for a better life" is all about. The details about the Corporate Social Responsibility projects for the financial year 2017-18 are provided in the Directors' Report.

6. INTERNAL CONTROL SYSTEMS

The Company has appropriate internal control systems for business processes with regards to its operations, financial reporting and compliance with applicable laws and regulations. The Audit Committee of the Board of Directors approves the internal audit plan and internal audits are conducted at regular intervals across various locations and processes in line with the approved internal audit plan. Audit observations and follow-up actions are discussed with the management of the Company as well as the Audit Committee.

7. CAUTIONARY STATEMENT

The statements in the "Management Discussion & Analysis Report" describing the Company's objectives, expectations and forecasts may be forward looking within the meaning of applicable securities laws and regulations. The actual results may differ from those expressed or implied, depending upon the economic and climatic conditions, government policies and other incidental factors.

For and on behalf of the Board of Directors

Pankaj Patel
Chairman
(DIN: 00131852)

Mumbai, May 23, 2018