

# Syngenta India Limited

## Annual Report 2013-14

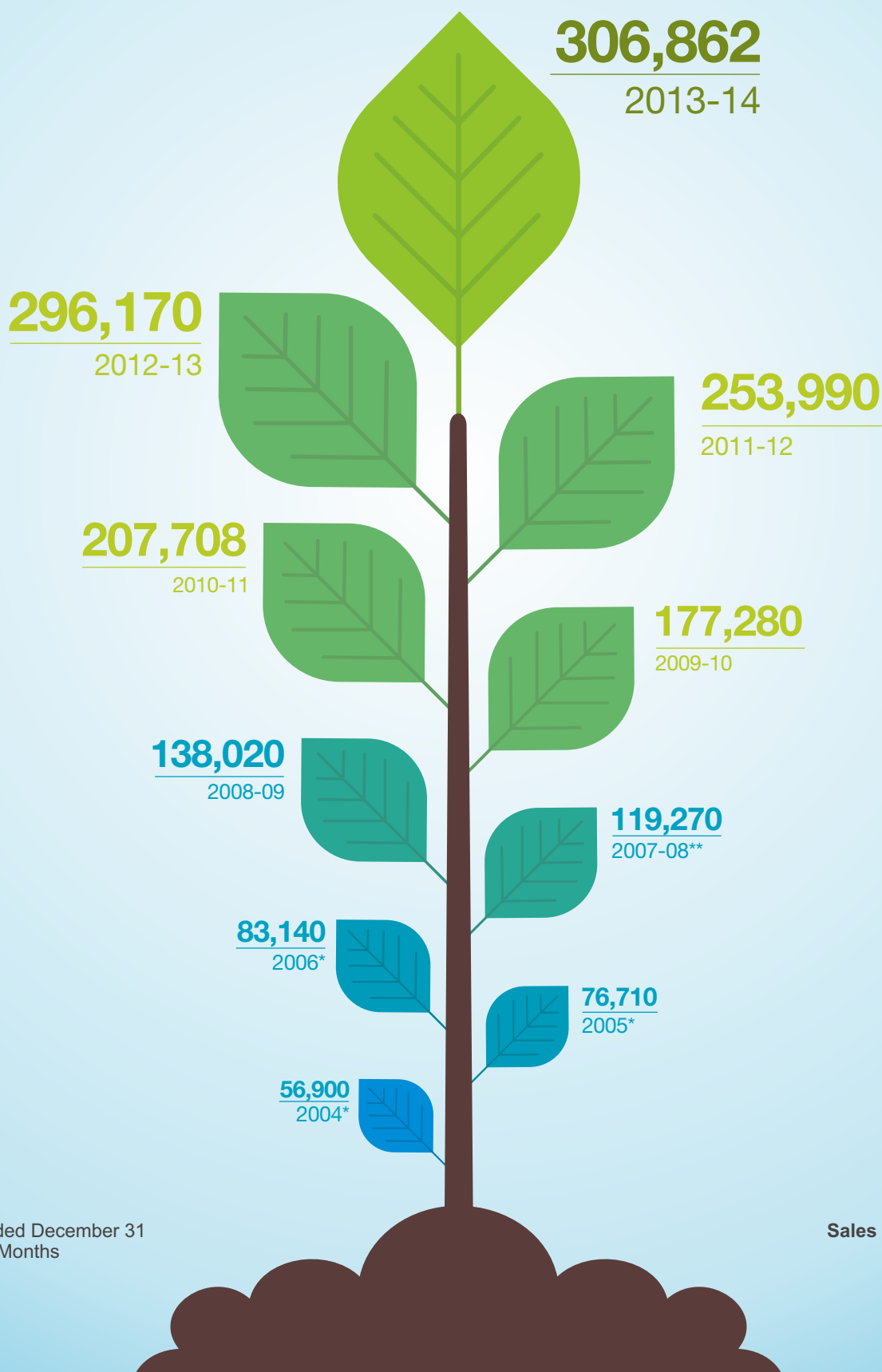
**Empowering farmers, transforming lives.**



**syngenta**

# Financial performance

In its present form, Syngenta is a young company. But it stems from an industrial tradition going back almost 250 years. We are proud of that heritage and of the many milestones en route to today's leading position worldwide.



\* Year ended December 31  
\*\* For 15 Months

Sales (₹ in Lakhs)



# Inside this report



## About this Annual Review

Syngenta India Limited is 'Empowering farmers and transforming lives' by creating integrated offers in the field supported by agronomic expertise and an understanding of the challenges growers face. We are building on our record of innovation in crop protection and seeds to develop new solutions that combine biology and chemistry, while incorporating adjacent technologies and building new business models. Our goal is to create value for our customers, outperform in the field and achieve big growth on the strength of our solutions for key crops like corn, rice, wheat, vegetables and specialty.

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- |   |                                       |    |                            |
|---|---------------------------------------|----|----------------------------|
| 1 | Nurturing our Company                 | 14 | Nurturing communities      |
| 4 | Message from Non - Executive Chairman | 18 | Nurturing our partnerships |
| 5 | Message from Managing Director        | 19 | Nurturing resources        |
| 6 | Nurturing sustainable agriculture     | 20 | Nurturing our people       |
| 8 | Nurturing the growth of our Farmers   |    |                            |



Bringing plant potential to life

## Nurturing our Company - Syngenta Global

By 2050, global food requirements will increase significantly, driven by a population increase to more than 9 billion. In order to meet the expected increase in demand for food and improved nutrition, particularly in emerging markets, farmers around the world will have to increase crop production by 70%. In this scenario, Syngenta brings a unique capability to address the increasing complexity of the challenges facing farmers. In 2011 the company launched its Integrated Strategy that builds on the combined strength of its Crop Protection and Seeds businesses to develop fully integrated offers on a global crop basis which are delivered through local go-to-market strategies to territories grouped under four regional markets: North America (NAFTA), Europe, Africa and Middle East (EAME), Latin America (LATAM) and Asia Pacific (APAC).

In its present form, Syngenta is a young company. But it stems from an industrial tradition going back almost 250 years. We are proud of that heritage and of the many milestones that helped us achieve today's leading position worldwide.

- Our product portfolio includes plant

breeding, crop protection and seed care.

- We contribute to meeting the growing global demand for food, feed, and fuel.
- We remain committed to protecting the environment, promoting health, and improving the quality of life.

Research, development and innovation are at the heart of Syngenta's strategy. With over 5,000 people in Research and Development (R&D) centers and field stations worldwide, we deliver innovation that addresses growers' need to increase farm productivity sustainably. In 2013, we invested \$1.4 billion in R&D.

Our strategy is complemented by a strong sense of purpose. The long-term success of our business is inextricably linked with the world's efforts to feed its fast-growing population and depends on sustainable transformation of farming productivity. With this objective we have made six commitments to help grow more food using fewer resources, while protecting nature, and at the same time helping people in rural communities live better lives. We call this The Good Growth Plan.

With its headquarters in Basel, Switzerland, Syngenta is one of the World's leading companies with more than 28,000 employees in over 90 countries dedicated to our purpose: **Bringing plant potential to life.** Through our world-class science, global reach and deep knowledge of farmers' needs, we are delivering integrated solutions that transform the way crops are grown around the world.







Integrated offerings

## Nurturing our Company - Syngenta India

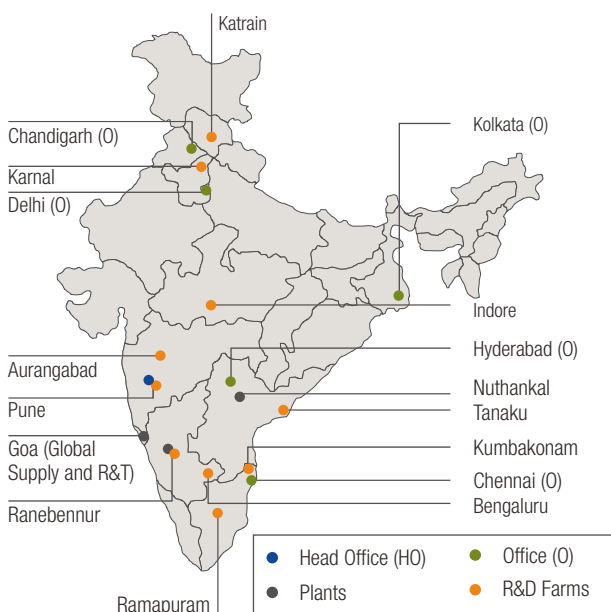


It is estimated that by 2050 India's population will have increased to 1.7 billion and their food requirements will have changed significantly. Increasing population, a demand for more food and more variety such as fruits and vegetables, are placing an unprecedented burden on agriculture and natural resources increasing the pressure on farmers who are working to meet India's needs for food, feed and fiber. Agriculture therefore plays a critical role in not only providing livelihood to more than 50 per cent of the work force but also food and nutritional security for a vast majority of the population.

Syngenta has been contributing to agricultural productivity and the well-being of growers and other stakeholders involved in the sector. We are committed to supporting India meet food, nutrition and fuel needs of the present and the future.

Syngenta has a significant presence in India and is headquartered in Pune. Our research station, Mulani Wadgaon farm in Maharashtra, is a key center for R&D activities and the hybrids developed here have significantly contributed to the Indian vegetable business. Our Field R&D farms are spread across India and consist of breeding, trial and support centers. The main research farms are located in Hyderabad, Aurangabad, Pune and Karnal. Our TEGRA™ research station in Tamil Nadu is called the Ramapuram Agronomy Centre. Seed processing plants in Nuthankal and Eluru in Andhra Pradesh and Rannebenur in Karnataka cater to conditioning and packaging seeds. Our global supply base Santa Monica Works in Goa manufacturing high quality and safe crop protection agents is one of Syngenta's six global R&D Capability centers. Our Research and Technology Center in Goa is a world class facility and an integral part of Syngenta's Global crop protection research.

### Syngenta Facilities in India



Map is for representation purpose only

Our integrated solutions for crops offer:

- Seeds that improve yields with early emergence, vigorous growth & quality input.
- Crop protection products that protect yields by controlling insects, weeds and diseases.
- Seed care technology that protects vulnerable seeds and seedlings from pests and diseases.

Driving our steady growth in India are our people. The SIL family consists of more than 1500 members dedicated and committed to the Indian farmer and agriculture.



## Message from the Non - Executive Chairman

India's first Prime Minister Jawaharlal Nehru had said in 1947 that "agriculture cannot wait". The relevance of the saying has grown manifold and there is ample evidence that combating hunger and extreme poverty requires an expanded commitment to agriculture and rural development. The sector not only contributes to development as an economic activity, but also as a livelihood.

Agriculture accounts on an average for less than 14% of India's GDP, and employs about 50% of our workforce. The country is one of the world's top producers of rice, wheat, milk, fruits, and vegetables. It registered a remarkable average growth rate of 4.1 per cent during the Eleventh Five Year Plan and has emerged as the world's largest rice exporter and second in terms of wheat exports. Some world bodies including OECD and FAO have portrayed a bright future for agriculture in India, in the medium to long-term, and have assessed that the sector will have robust growth in the coming years as well as will maintain a stable trade surplus.

Promoting modern technology driven agriculture in a developing country like India is not only the solution for eradicating poverty and hunger but also a vehicle for enlarged employment opportunities. Trends since 1990 reveal that the countries that made progress in reducing hunger were the ones that had a growing agricultural GDP. Empirical studies show that GDP growth generated by agriculture is at least twice more effective in reducing poverty than growth generated by other sectors of the economy.

Historically too, the results have been spectacular. Since the introduction of the green revolution, India saw its aggregate food grain production nearly double from 82 million tonnes in 1960-61 to 172.5 million tonnes in 1990-91. The government's recently released fourth advance estimates for 2013-14 pegged food grain production at a record 264.77 million tonnes. This is a phenomenal increase, stemming from only a moderate augmentation on the amount of agricultural land used. But with the boom came significant costs - including topsoil depletion, groundwater contamination, increasing costs of production etc.

As India gets ready to tackle the existing agricultural scenario and give momentum to the farming sector, we

at Syngenta wish to reiterate our commitment to millions of growers. Indian agriculture is dominated by small farmers. 86 percent have landholdings of less than two hectares but cultivate 44 percent of the farmland and their contribution to farm output exceeds 50 percent. They present a huge potential for productivity enhancement.

Syngenta focuses on developing sustainable models to address the needs of smallholders with better seeds, chemistry and integrated solutions that help them grow more food while ensuring optimal use of natural resources. For more than a decade Syngenta has been contributing to agricultural productivity and the wellbeing of growers and other stakeholders in agriculture.

In 2011, we launched our strategy focused on delivering integrated solutions. We built on our record of innovation in crop protection and seeds to develop new solutions that combine biology and chemistry, while incorporating adjacent technologies. In 2013, our integrated strategy continued to advance and its relevance to growers is undisputed.

Syngenta actively encourages safe and responsible use of its products. Our stewardship and extension programs support and train growers to use our products safely and effectively to maximize benefits while reducing the risk of harm to themselves and the environment. Last year our field personnel reached out to more than 1 million growers through our initiatives.

I would like to end by saying that Indian agriculture is at a crucial juncture. With yields still far below international standards, the country is yet to realize its full potential. And we at Syngenta are committed to helping India meet its food and nutrition needs of the present and the future. What is most heartening though is the unwavering determination and the tireless efforts of our Indian farmers who are eager to play a greater role in the nation's growth story.

Let us help to nurture their dreams and empower them for a better tomorrow.

**Prakash K. Apte**  
Non - Executive Chairman



## Message from the **Managing Director**

It is said that necessity is the mother of invention. For agriculture, such a moment of necessity has come in the search for new approaches to farming. Solving the future challenge of producing more with less and in a more sustainable manner is not mission impossible, but it does require a fundamental shift towards a different growth path and a swifter transfer of new products and techniques into practice.

At a time when the country's population is growing, and the availability of new arable land is shrinking, ensuring food security is our greatest development challenge. The matter takes on a special significance in India which has about one-quarter of the world's total food-insecure people. In order to create the conditions for lasting food and nutrition security, our efforts must be sustainable – economically, environmentally and socially.

Science's contribution to revolutionizing agriculture is invaluable. In particular, chemistry, biology and genetics have allowed us to produce more and more, with less and less. But we also have unprecedented challenges like- climate change, millions of people starving, an ageing farming workforce and India's population which is predicted to increase by half a billion by 2050, requiring a substantial increase in food production. Providing enough food in this context will be an unparalleled scientific, economic and political jigsaw puzzle.

Science underpins the responses to all of these challenges. This has been recognized at the most prominent, national level. From the emphasis on 'Per drop more crop' by the PM himself to the introduction of very robust provisions in the Budget such as Soil Health cards, nationwide irrigation network and agri-tech infrastructure fund, the agriculture sector looks set to get a higher technological infusion in the coming years. The Government's intentions to bridge the gap between agriculture and innovation is strongly in focus. An indication on this came when the Prime Minister recently emphasized the need to bring results of the laboratories to the farms.

It is encouraging to see the government's National Mission on Agricultural Extension & Technology (NMAET) aimed at strengthening agricultural extension to enable delivery of appropriate technology to farmers through the use of ICT. The announcement from the environment ministry to make India "Land Degradation Neutral" by 2030 is also a welcome move. The first Union Budget of the newly elected Government has set itself the target of sustaining a 4% growth rate in the sector and has announced a slew of measures to make farming competitive and better integrated with the market.

Public-private-partnership is the need of the hour, as it will give both sides a chance to learn from each other's experiences in tackling the problems of the farming



community. More so because the private sector collectively invests almost 10-15% of their sales in R&D.

As a company committed to contributing sustainably to Indian agriculture, we are enthused and willing to partner all stakeholders in scripting a vibrant future and nurturing the dreams of millions of Indian farmers.

We at Syngenta know that farmers can enhance productivity up to 30 % in important crops like rice, wheat, corn, cotton and vegetables by following our simple integrated protocols and applying inputs at the right stages of the crop cycle. Syngenta is introducing the best kind of seeds and crop protection products that prevent yield losses in the range of 10 per cent to 30 per cent annually due to insect pests, diseases and weeds. We have recently launched three new products Chess and Taspas for rice and Alika for cotton. We hope these new launches will emerge as key solutions in the Indian farmer's toolkit to manage productivity.

Syngenta India believes in developing and promoting programs to minimize soil erosion and maintain or even improve soil productivity. One of the biggest threats to biodiversity is conversion of forestlands to produce more crops. The recommended use of Syngenta's crop protection products and seeds help farmers improve productivity on existing farmland and prevent inefficient use of water.

We also know that farming at any scale is a business. And businesses need clear linkages along the value chain, from production to processing, to marketing, and ultimately, to consumption. Agricultural businesses can offer a pathway out of poverty, but for this to happen the public and the private sectors need to work together to support smallholders.

We have recently launched 'The Good Growth Plan' which includes specific commitments to address critical challenges the world faces in feeding a growing population. We are setting ourselves six specific targets related to improving resource efficiency, rejuvenating ecosystems and revitalizing rural communities.

Thus, achieving holistic agricultural growth is Syngenta's global mantra!

**Bipinchandra C. Solanki**  
Managing Director





## The Good Growth Plan

## Nurturing sustainable agriculture



A billion people in the world go to bed hungry each day and by 2050 there will be two billion more mouths to feed which will be one of the world's biggest challenges. The resources required to grow our food – including land, water and energy – are already overstretched.

Every year, millions of hectares of land are lost to erosion, degradation and urbanization. We are losing biodiversity and habitats for pollinating birds and insects which are critical to food production. And many smallholder farmers are trapped in a cycle of poverty.

The world's food security, and that of India's, depends on finding sustainable solutions to these challenges. Humanity has to grow more, while preserving natural resources, healthy ecosystems and thriving rural communities. The Good Growth Plan is Syngenta's commitment to make a measurable contribution by 2020. Globally the Good Growth Plan aims to:

1. Increase the average productivity of the world's major crops by 20 percent without using more land, water or inputs
2. Improve the fertility of 10 million hectares of farmland on the brink of degradation
3. Enhance the biodiversity on 5 million hectares of farmland
4. Reach 20 million smallholders and enable them to increase their productivity by 50 percent
5. Train 20 million farm workers on safety practices, especially in developing countries
6. Strive for fair labor conditions throughout our entire supply chain network

With India alone estimated to add half a billion people by 2050, farmers will have to grow crops more efficiently, conserve existing land, improve biodiversity and most importantly integrate the vast multitude of smallholders currently holding less than two hectares into the mainstream of the developmental process.

Per hectare productivity is low in India compared to other regions. 98 percent of the available agricultural land is already under cultivation and more than 80 percent of the increase in production will have to come from yield increases.

**More food  
Less waste**



**Make crops  
more efficient**

Increase average productivity of the world's major crops by 20% without using more land, water or inputs

**More biodiversity  
Less degradation**



**Rescue  
more  
farmland**

Improve the fertility of 10 million hectares of farmland on the brink of degradation



**Help  
biodiversity  
flourish**

Enhance biodiversity on 5 million hectares of farmland

**More health  
Less poverty**



**Empower  
smallholders**

Reach 20 million smallholders and enable them to increase productivity by 50%



**Help people  
stay safe**

Train 30 million farm workers on labor safety, especially in developing countries



**Look after  
every worker**

Strive for fair labor conditions throughout our entire supply chain network





**86%** land holding of less than 2 hectares by small farmers  
but they cultivate **44%** of the country's farmland  
and their contribution to total farm output exceeds **50%**



A thrust on horticulture products and protein-rich items is required for enhancing per capita availability of food items as well as ensuring nutritional security. The above factors make the productivity commitment very important for our region.

Poor water management on 32 percent of India's total land area has resulted in degradation through salinization and waterlogging. This can cause yield decreases of 10 to 25 percent for many crops and may prevent cropping altogether when it is severe. Besides, huge quantities of nutrients are lost during crop production cycle, deteriorating quality and health of soil. The research and development challenge would be to stop further degradation and go in for rehabilitation of degraded lands and water resources in a cost effective manner.

Agriculture in India is dominated by small farmers. Landholdings declined from 2.30ha in 70s to 1.32 ha in 2000-01 and if this continues, average size would be a mere 0.68 ha in 2020 and 0.32 ha in 2030. Smallholders who contribute more than half of the total farm output in India present a huge potential for yield improvement.

Syngenta has always been aware that our business can only grow if we ensure that farming is carried out in a sustainable way. The Good Growth Plan brings this awareness to life through our focus on land, technology and people.



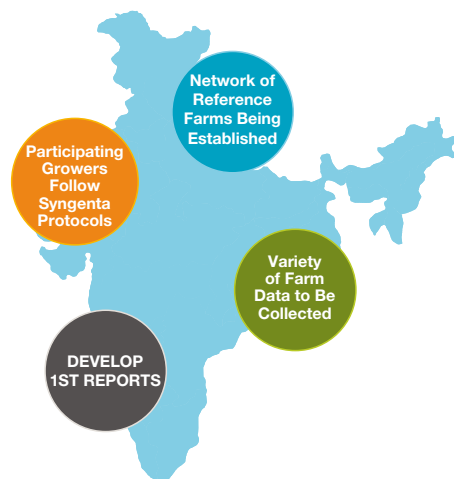
Syngenta is committed to provide innovative and safe technology to the growers to enhance farm productivity and ensure that the increasing challenges of sustainable agriculture are addressed through these technologies. Good Growth plan is the right vehicle to meet these commitments.

**Sarjiwan Manhas**  
R&D Head, South Asia



## Focus in 2014

### SETTING UP THE GOOD GROWTH PLAN FARM NETWORK



**With the Good Growth Plan, Syngenta aims to make a deep, lasting and positive impact on the farmers and rural communities who ensure the worlds' food security. That way, we can contribute to the long-term sustainability of our planet.**

### MEASURING OUR PERFORMANCE

#### ON FARM PERFORMANCE WILL BE MONITORED AND ANALYZED

Data from these farms will be independently collected on a variety of inputs including yield, quality, labor hours, water, crop protection products

#### A NETWORK OF BENCHMARK FARMS WILL ALSO BE MONITORED

Benchmark farms will match Syngenta reference farms in profile

Benchmark farms will follow conventional agronomy practices

#### COMPARATIVE RESULTS WILL BE REPORTED ANNUALLY AND WILL BE AUDITED EXTERNALLY

### WHAT IS A REFERENCE FARM

Reference farms reflect the focus of Syngenta in terms of crops, location and farmer profiles.

Growers who agree to be part of Syngenta's Good Growth Plan reference farm network follow good agricultural practices based on agreed protocols.

These protocols are designed by Syngenta and are tailored according to the local needs to ensure from the outset the same resource efficiency we achieve in more developed growing systems.

Reference growers will document all agricultural activities.



Our combined offers

## Nurturing the growth of our Farmers

At Syngenta India Limited, we know that the key challenge for the Indian grower is to improve yields sustainably without using up more resources. The answer lies in a system-wide approach that links technology, land and people- all of which can together lead India's agriculture sector to the next level of sustainable performance.

We are in the business of developing better seeds, crop protection products

and integrated solutions that help farmers grow more food. Through our combined offers and continuous innovation, we increase per acre yield, help accelerate technology adoption while enabling growers to deal with an increasingly demanding value chain. The company contributes directly to food security and is committed to fighting hunger in line with the country's developmental goals. In the next few pages you will meet our farmers- 'Our Champions' who have raised crop productivity sustainably, using our products and solutions.

“Our success is a testament to the value that farmers find in our products and solutions and the faith they repose in us. For Syngenta, it will always be about providing value, building trust, and ensuring the success of our growers.”

**Parveen Kathuria**  
Head of Sales



Product safety and environmental considerations are also integral to our work. For every crop protection product that reaches the farmer's field almost 100,000 are tested but discarded because they don't meet our efficacy or safety standards. We have recently launched three new products in the Indian market- Chess, Taspa and Alika.



Plant hoppers are the biggest threat in the reproductive and ripening stages of the rice crop. Syngenta has introduced Chess- a product that is used in our integrated solution for rice and is the best solution for hopper management. A unique technology innovation, Chess is critical for delivering the potential of the crop in the last 60 days. It gives long-lasting control against all types of brown plant hoppers which can severely damage the yield. Timely application of Chess at the early booting stage is essential to ensure that the hopper does not permanently harm the rice crop.



Another new product we have launched is Taspa, a systemic fungicide which guarantees effective disease control in rice. It sets into the plant system and keeps the plant disease-free for a longer time as compared to other fungicides. Timely application of Taspa in the vegetative phase assures strong and healthy tillers which set the yield potential for the rice plant.



The early stage of Cotton is marred by sucking pests like Aphids, Jassids and Thrips which can reduce crop yield potential. Alika, a new insecticide mixture brand from Syngenta, is 'number one' globally. Its use is recommended in the first 50 days of the crop. The ZC (Zeon capsules) formulation of Alika gives excellent rain fastness and greening effect, resulting in a good crop outlook. This provides the right start to the cotton crop and lays a solid foundation for realizing better yields.