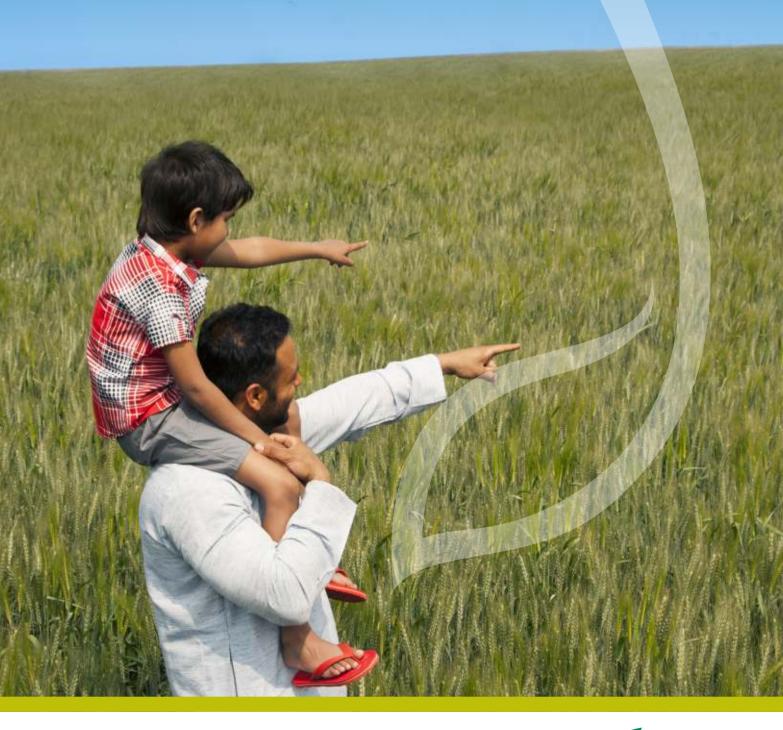
Syngenta India Limited
Annual Report 2015-16

## Living up to Our Commitments







## Special initiatives

#### **Syngenta Learning Centre (SLC)**

Syngenta Learning Centres are unique knowledge centers where we train Lead Farmers and influential growers on how best to grow crops and increase productivity. Our technical support team design SLCs to highlight the benefits of using the right product at the right time using the right application. Lead Farmers learn about the best practices for each crop growth stage and become Syngenta ambassadors to promote them to their own network of growers. The combination of SLCs and Lead Farmers allows Syngenta to develop strong and meaningful relationships with growers that in turn drives our business. Till date, we have conducted more than 25 SLCs which have touched more than 0.26 million farmers. 15 SLCs will be showcased in the coming year. We also involve the broader stakeholder universe of the government and the media in these programs.



#### **Product Security**



NK 6240 is a corn hybrid which is protected under The Protection of Plant Varieties and Farmers' Rights Act of India. Last year through an investigation we became aware that duplicate NK 6240 was being cultivated in about 200 acres of land in and around Eluru district in Andhra Pradesh.

Investigations conducted revealed a major nexus of illegal seed growers in the area and one such link was uncovered by the Government Authorities on our complaint. In order to create an impactful deterrent to illegal seed producers, the police seized the harvested crop and booked the illegal seed producers with cheating and criminal conspiracy.

#### **Hives on Farms**

As the largest, dedicated agribusiness in the world; Syngenta is committed to ensuring that bees which are essential to pollination and hence to food security, thrive now and in the future. The Company is undertaking many pollinator initiatives in the country.

Syngenta started its 'Hives on Farms' initiative in Ludhiana (Punjab) and Karnal (Haryana). The objective of this unique project is not only to set up hives on Syngenta farms but also partner with local beekeeping organizations and academic institutions, like PAU and HAU, to train farmers, beekeepers and other stakeholders in the proper management of pollinators.

Syngenta also signed a Memorandum of Understanding with the All India Coordinated Research Project- Honeybees and Pollinators (AlCRP-HB & P), a body of The Indian Council of Agricultural Research to create awareness on effective pollinator conservation amongst apple growers in Himachal Pradesh. Apple is an important crop constituting almost 89% of the Rs 3,500 crore fruit economy of the state. The apple farmers are increasingly relying on honey bees for their pollination services. We conducted a workshop for apple growers in Kulu where University scientists and ICAR officials trained farmers on how to manage pollinators in order to boost fruit productivity.







## Your Trusted Company: Syngenta

Syngenta is in a strong and unique position to address the increasing complexity of the challenges farmers face. With our unique approach of "thinking like a grower", we believe in giving the farmers an integrated solution to all their problems whether it is soil, inputs, weeds or technologies. With this approach, we also believe that we will be able to contribute in a significant way towards food security - one of the key developmental goals of the country. Through our integrated offers and continuous innovation, we increase per acre yields, help accelerate technology adoption while enabling growers to deal with an increasingly demanding value chain in a profitable manner. 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.

Syngenta has been contributing to agricultural productivity in India and the well-being of growers and other stakeholders involved in the sector. Driving our steady growth in India are around 1300 employees dedicated and committed to the Indian farmer and agriculture.



### Our latest product offerings



#### Frontline S7001

Syngenta's Rice hybrid S7001 is the best choice available to growers looking for consistent performance in medium duration segment with added benefit of superior grain quality.



#### VoliamFlexi

VoliamFlexi is a unique, broad spectrum, soil systemic insecticide solution which provides your crop a pre-emptive boost of energy and keeps it going through out its life cycle.



#### Virtako

For Rice growers
VIRTAKO is a
unique, new
generation granule
insecticide having
excellent control and
long lasting
protection from
Stem Borer.



#### **Fusiflex**

For Soybean and Groundnut growers, Fusiflex is the product which provides quicker relief from weeds and also offers greener and safer crops leading to a higher yield.



#### AmistarTop

Amistar Top is a unique protector which supports healthy flag leaf and more grains per panicle ensuring higher yield.



#### **Ampligo**

Ampligo is an excellent technology for protection from Pod Borers in Red Gram and Bollworms in Cotton.





# Message from the Non-Executive Chairman



Agriculture will remain the backbone of the Indian economy primarily for two reasons – First and foremost, India can make a dent on poverty and unemployment only by growing at double digits and for that to happen agriculture needs to grow at a minimum of 4 per cent. Secondly, around 50 per cent of the workforce is still engaged in agriculture and allied activities that will have a bearing not only on ensuring food production but also employment in the economy.

The population increase and climate change issues have made agriculture more complex than ever. To meet the expected increase in demand and tackle the vagaries of weather, farmers in India will not only have to increase crop production substantially but also adopt the latest technologies in farming because resources like soil and water are fast getting depleted.

Syngenta has started to address these challenges through The Good Growth Plan initiative which is particularly relevant to India as agriculture continues to be the mainstay of the country's economy. Through the Good Growth Plan, we are helping farmers grow crops more efficiently, conserve existing land, improve biodiversity and most importantly integrate the vast multitude of smallholders into the mainstream of the developmental process.

Our goal is to enable farmers in India grow more from less and maximize resource efficiency while improving productivity. Hence we have created a network of reference farms across crops and regions in our key markets where we will showcase the improvement in productivity of key crops like rice, cotton, corn, tomato, and soybean through our integrated crop solutions.

In 2015, we have reached 1.5 million smallholders through our products. In addition, we also empower smallholders through special projects and activities that promote agronomic knowledge like Syngenta Learning Centres and Lead Farmer Networks.

Safe use training has for many years been an integral part of how we do business. In 2015, we equipped more than 0.9 million growers with knowledge on the safe use and proper handling of crop protection products. This ensures that farmers use our products safely throughout their life cycle from design to disposal.

Through our Syngenta Me & Mine program, in partnership with the Fair Labour Association we aim to address labour standards, eradicate child labour and improve overall agriculture working conditions on our seed farms. Syngenta Me & Mine helps to build tangible and practical commitments from vegetable seed growers so they have a sense of ownership in the outcomes for their families and communities. In 2015, we became the first agriculture company to receive FLA accreditation, for our program in India.

We are raising awareness of issues relating to soil health in India by initiating a Soil Health Analysis project. This project was piloted in Karnataka and Gujarat in 2015. The project helps participating farmers to understand their soil and the health status of their land. This is followed by recommendations on nutrient requirement and application. Coupled with agronomic support, this project can help farmers to increase their productivity by keeping their soil healthy. In 2015, this project covered 3274 farmers.

In the subsequent pages you will read stories about how the Good Growth Plan is making a difference on the ground for the farmers of India.

I would like to assure all of you that Syngenta will remain dedicated to our long-term commitment in India through our world class sciences, innovative crop solutions and The Good Growth Plan.



Prakash K. Apte Non-Executive Chairman



# Message from the Managing Director





At Syngenta, we firmly believe that it is critical not only to ensure farmers produce more but also enjoy a good return on investment. For making agriculture profitable for farmers, it is also necessary that technologies are available to conserve natural resources, promote exports and increase value addition for higher and inclusive agricultural growth. To promote innovation, Syngenta invests around \$ 1.4 billion a year in R&D globally, and is unique in combining chemistry, genetics, breeding and computational science to develop new products and solutions. Our R&D function is already the most productive in the industry and helps us achieve our goal to improve profitability while creating value for our customers through higher yields and better use of resources. Our objective of above-market growth is underpinned by our recent new product launches, current strong pipeline and experience in tailoring and adapting integrated offers.

2015 was a challenging year for the agriculture sector on a number of fronts, but one during which Syngenta demonstrated its resilience, outperformance and excellence. We managed to gain market share while improving our sales in these difficult conditions and are proud of what our Company has achieved.

We believe that there is tremendous potential to drive India's crop productivity and improve grower profitability. We will drive this through our ICS Protocols for key crops like rice, vegetables, corn and specialty which according to our estimates, will contribute to 80% of India's agricultural growth in the years to come. Our ICS Protocols which address farmers' needs- from seed to harvest, will be supported by our robust Seed Pipeline.

The coming five years will also see frequent launches and scale-up of trusted world-class Crop Protection products which we will constantly bring to the market on the strength of our Research and Development.

Syngenta Learning Centres (SLCs) are an integral part of our new strategy through which our robust and trusted portfolios will see significant enhancements in the coming years.

Our practice of setting-up Learning Centres is aimed towards educating growers about Syngenta's technologies and solutions. Through SLCs, we provide visual, real world demonstrations of the benefits of technology and integrated solutions along with the best agronomic practices and compare them with traditional grower practices.

SLCs, Satellite Demos and Lead Farmers will help growers and retailers gain experience and training on Syngenta ICS protocols. Not only will we successfully showcase our solutions but will also provide knowledge about our products along with trusted and relevant advice.

Smallholders hold the key to future food security as their relatively low productivity means they offer the greatest potential for increasing production. We aim to raise smallholders' yields and earnings sustainably by bringing them products, know-how and training because a staggering 77 million farming households in India, own less than five acres of land and they need rapid deployment of scale neutral technologies. Our integrated solutions like GroMore for rice, MaxVeg for vegetables, StartRight for corn and Fast Start for cotton, all aim to increase the profitability of smallholders. We attach great importance to handholding these growers through the entire farming process to help them address the various challenges with respect to soil, pests or weeds. We also ensure they don't use outdated methods which negatively impact their returns and the agricultural output of the country.

We recognize, however, that alone we cannot fulfil every need. All stakeholders need to come together and help transform agriculture from being a traditional way of life to a scientifically driven industry supported by the latest technologies. Hence we enter into partnerships and collaborations to give our customers access to additional tools. In the current scenario, if India has to achieve food security we need to deal with the twin issues of affordability and availability. This means we need to have the right solutions for resource efficiency and the right production strategy for all our major crops. To achieve a sustained 4 per cent growth in agriculture, implementation would be key.





The Good Growth Plan is our commitment to help farmers meet the challenge of feeding a fast-growing world population sustainably. That's central to our strategy for ensuring that our own business has a sustainable long-term future. We are consciously setting our sights higher as well as measuring and reporting the impact. Our Global commitments are as follows:

#### One Planet, Six Commitments.

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 gradation



Help biodiversity flourish

Enhance biodiversity on 5 million hectares of farmland More health Less poverty



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

#### Challenges

In 1950, a hectare could feed two people. By 2030, it will have to feed five.

But is it possible to grow more food without using more inputs like chemicals, water, and without clearing more land for farming? We believe it's not only possible, it is critical if we are going to protect our planet for the future. We lose a soccer field of farmland every second to desertification, urbanization and degradation.

Nature takes 500 years to replace just 25 millimeters of lost soil.

Farming depends on biodiversity. It's vital for pollination – more than a third of agricultural crops depend on pollination by bees and insects.

We need to help farms become more productive, and farmers to protect and improve the biodiversity around their fields. Most of India's farmers are smallholders on less than two hectares of land.

**Empower** 

smallholders

Reach 20 million

smallholders and

enable them to

productivity by

increase

50%

For many, the financial risks are high and the returns are low. With more than 50% of the population depending on agriculture for their livelihoods, it's crucial that we help farming communities prosper.

Agriculture is the world's second largest source of employment.

Our stewardship programs raise awareness of the risks associated with agriculture and share knowledge of how they can be effectively prevented.

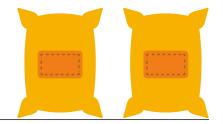
Hours of work, wages and benefits, child labor, discrimination, these are just some of the labor issues that are often part of broader socioeconomic problems, particularly in rural areas with high poverty levels and little opportunity for education or employment.



To test and measure how farm productivity can be increased, we have created a network of reference farms across crops and states in our key markets in India. In 2015, the network covered 44 reference farms and 138 benchmark farms. Our crop advisers continued to work with reference farmers to optimize the way they use new products and to provide feedback. We share results with farmers, researchers and those seeking to understand how best to save scarce resources.

Our integrated solutions: GroMore for rice comprises of simple crop protection protocol and agronomic know-how to help growers establish and protect their crops. MaxVeg combines best hybrids, crop protection technology and agronomic expertise for vegetables. Start Right, a comprehensive corn solution supports farmers through crop protection products, customized agronomic and precision farming protocols, and quality hybrids. Fast Start for cotton improves early crop establishment, ensures strong plant growth and delivers greater yields, resulting in increased grower satisfaction and profitability.

We aim to improve productivity of key crops like rice, cotton, corn, tomato, and soybean. We are tracking productivity and resource efficiency onfarm in 14 states: Punjab, Haryana, West Bengal, Uttar Pradesh, Chattisgarh, Bihar, Jharkhand, Gujarat, Madhya Pradesh, Maharashtra, Rajasthan, Karnataka, Andhra Pradesh and Tamil Nadu.



#### Our progress in 2015 in India



#### Innovative solutions tailored for the grower

- A stage-wise approach for crops
- Targeting specific pain points at each stage
- Providing integrated solution with our crop protection and agronomic expertise.

GrowMore MaxVeg StartRight FastStart



Rampal Singh a native of village Bastada in Karnal, Haryana is a Good Growth Plan reference farmer who is proud to be associated with the program. He has 10 acres of land on which he grows crops like paddy, wheat and vegetables. He has been using Syngenta solutions for more than 15 years.



Initially I was single handedly managing my field, but now as a Syngenta Reference Farmer I am being supported by Syngenta's technical and commercial teams. This has supported me in taking better care of my crop and my harvest is nearly 2 quintals more than my fellow farmers without using more inputs.





The Good Growth Plan

## More Biodiversity Less degradation



#### Rescue more farmland

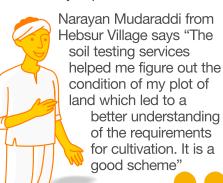
#### Our progress in 2015 in India

We are continuing to raise awareness of land degradation and to promote soil conservation. In 2015, we carried on building our best soil knowledge and tools – diagnostics, management practices and technologies – into our commercial offers. We offered soil testing services to 3274 of our lead farmers working in partnership with a leading soil testing laboratory. Depending on the results of these tests, soil health based nutrient recommendation was given to optimize nutrient usage and increase the productivity. Our program impacted 1309 hectares of land.

Farmers who have availed of the soil testing facilities are happy to be part of the project.



Santosh Kamadolli from Kiresur village in Dharwad district says "Soil Testing is a good initiative by the Syngenta Team. It saved me from using excess fertilizer and hence reduced my expenditure"



### Help biodiversity flourish

Biodiversity is damaged as species' habitats are lost or fragmented. Planting multifunctional field margins on less productive farmland supports wildlife, and helps to prevent soil erosion and protect waterways. However, achieving desired results on the ground is a slow and resource-intensive process. We are educating growers to invest in marginal and less productive land for biodiversity.

We are working with partners in India to identify priority programs tailored to local conditions, and we are hopeful of rolling them out in the coming years.

#### The importance of biodiversity and land management



The importance of pollination

Pollination is crucial to improve crop productivity and quality. We support the creation of Multifunctional field margins on the farm to help make habitats for pollinators.



The challenge of soil erosion

We assist in increasing land fertility sustainably by improving soil structure and adding organic matter through appropriate use of fertilizers, crop rotation and other techniques to avoid needless ploughing.



The benefits of crop rotation

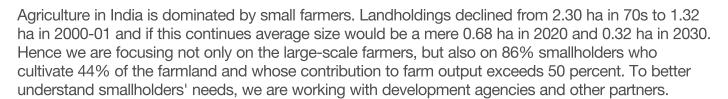
Crop rotation is the practice of growing different crops sequentially on the same field during different seasons and years. We advise farmers to follow this practice as it gives various nutrients to soil and can help maximize crop yield potential.





The Good Growth Plan

## **Empower smallholders**



## Project Nirmiti- to enhance productivity of smallholders

'Project Nirmiti' is Syngenta's unique initiative to enhance the productivity of smallholders through access to knowledge, technology and high quality inputs. It aims to reach smallholders through "Krishi Tantra Sevaks" (KTS) or 'Farm Technology Service Providers', by means of a fully set up Center of Excellence (COE) which disseminates information on Syngenta crop solutions. Project Nirmiti has made extensive progress in 19 districts of Odisha, Jharkhand and Assam. Nirmiti's benefit to small farmers was measured in 2015 by conducting a Rice productivity enhancement study which showed that rice farmers using Syngenta solutions had an incremental yield of more than 56% in 2 consecutive years.



#### Our progress in 2015 in India

Reached 1.5 million smallholders

#### Empowering smallholders through

- Access to technology,
- Knowledge transfer platforms
- Solutions tailored to smallholders



A Lead Farmer is a progressive farmer of the community who is an early adopter of technology. Through training and access to new technology, Syngenta enables these lead farmers to help fellow farmers in the community improve their productivity.



Project Nirmiti is a business model that aims at increasing the productivity and income of smallholders in India through other enterprising smallholders, who become "Krishi Tantra Sevaks" (KTS) and supports 3-4 neighboring villages with agricultural knowhow and inputs supply.

Chakradhara Giri, a small farmer from Jamunaposi village, in Keonjhar district of Odisha was also part of the rice productivity enhancement study conducted by Syngenta. Giri is totally dependent on agriculture for his livelihood and started implementing our protocol for rice in 2015, when he came in contact with a Syngenta KTS in his area.



When I began following the complete Syngenta protocol with support from the Nirmiti Team, a miracle happened! I got 35 quintals per acre from my plot which had till last year not given more than 20 quintals of output! The resulting crop got readily accepted in the market due to its superior quality. I am also thankful for the agronomy knowledge, pest management techniques and mechanization knowhow given to me by the Nirmiti team. I could never study, but with my increased earnings I can now provide a sound education to my younger siblings and my children.



The Good Growth Plan

## Help people stay safe

Safe use training has for many years been an integral part of the way we do business worldwide, but our approach has varied from country to country. As part of The Good Growth Plan commitment we have harmonized our approach and developed guidelines and tools that enable our people to plan and implement training consistently. Our training programs raise awareness of hazards, principally those related to crop protection products, and show how to manage and prevent them. More than 90% of our training is delivered by our own sales and stewardship teams. To extend our reach, we also work

The safe and responsible use of our products is fundamental to our ambition of helping farmers to grow more food using fewer resources. In 2015 we trained nearly 900,000 growers through stewardship programs on how to use our products safely and effectively to maximize benefits while reducing the risk of harm to themselves or the environment. They were also given information about the use of safety kits and 15,000 safety kits were distributed free of cost to farmers along with 20,000 safe use posters.

with both commercial and academic partners.

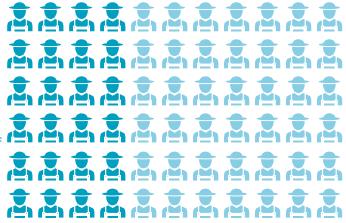
Through our "Stewardship Week" in various Commercial units across the country we conducted about 2200 meetings and training programs. We imparted knowledge on safe use of pesticides to more than 75,000 people including growers, farm labor, extension workers, government officials and university scientists. Messages on good stewardship practices, safe use and handling of pesticides, application technology, secure storage of crop protection products and resistance management were imparted.

Syngenta medical and toxicology experts regularly train doctors and staff at hospitals and poison control centres in the areas of diagnosing possible health effects from exposure to crop protection products and establishing the best course of treatment for patients, along with detailed preventative health programs.

#### Our progress in 2015

0.9 million

Farmers
trained in Safe
use of our
products out of
which 0.38
million were
smallholders



#### Integrated product and safe use trainings

- In India, Syngenta conducts stewardship training for smallholder farmers at the beginning of all our commercial activities.
- We have partnered with an NGO to evaluate the effectiveness and impact of our stewardship activities. This partnership will support our Campaign.
- Doctor training and working with health professionals at a national, regional and local level is a pivotal activity of the Syngenta Stewardship program.

