syngenta foundation India

ANNUAL REPORT

2015-16

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Joint Message from the Chairman, SFI and Executive Director, SFSA

Dear Friends,

We are pleased to present the Syngenta Foundation India Annual Report 2015-16.

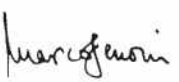
It is with a great sense of pride that we can say the Syngenta Foundation India is moving from a project-focused approach towards the development of scalable and sustainable business models. The introduction of Agri-Entrepreneur (AE) initiatives and credit access for small farmers creates completely new ways of helping these farmers to increase their income. The AE model is at a very early stage, but shows promising signs that it can be scaled up.

The replication of the successful weather insurance initiative by the Syngenta Foundation for Sustainable Agriculture (SFSA) in India reinforces the fact that SFSA and SFI business models are independent of geography and can be introduced in other regions.

Access to markets and access to irrigation are two of the defining aspects of successful farming. We are pleased to announce that SFI has started work on the development of irrigation infrastructure by arranging credit for farmers' groups. Irrigation allows small farmers to produce second and sometimes third crops, thereby increasing their income significantly.

On behalf of the Board of Directors of SFI and SFSA, we would like to thank all our partners, staff and donors for their continued support of SFI's strategy to develop scalable and sustainable business models for the development of agriculture in India.

Prakash Apte
Chairman
Syngenta Foundation India (SFI)



Marco Ferroni
Executive Director
Syngenta Foundation for Sustainable Agriculture (SFSA)

Message from the Executive Director, SFI

Dear Friends,

I take great pleasure in presenting the annual report 2015-16.

During the year we have introduced the Agri-Entrepreneur (AE) model as part of SFI's Phase III strategy. Market-led extension initiatives were successful in Phase II, in which rural young people were appointed to salaried positions to help farmers' groups increase their income. The AE model is an adaptation of the market-led extension initiative, but in this business model the AEs earn commission by providing services. The AE model is thus sustainable, and also meets the foundation's requirements for 'scale' and 'exit'. Once the AE is providing efficient agricultural services to a farmers' group and these services prove to be satisfactory, the Syngenta Foundation can withdraw from the region and move to a new area.

SFI introduced the insurance product 'replanting guarantee' to corn farmers in Rajasthan. This product was adapted to conditions in India by registering farmers through a call center, in contrast to the automatic mobile technology model used in West Africa. It was successfully tested, generating significant local awareness of the product. 482 farmers received compensation, thereby establishing the credibility of this innovative insurance product amongst local farmers and agri input retailers.

Continuing the strategy defined by Phase III, SFI created a further business model focused on irrigation infrastructure development. A new credit product was created for farmers who had access to water, but were unable to make large investments in irrigation. This product allows a financial institution to provide credit for irrigation infrastructure development, with repayment made by farmers in installments from the profits of the second crop. It enabled many farmers to produce a second crop for the first time in their lives, thereby increasing their annual income significantly.

On behalf of SFI, I would like to extend my profound gratitude to all our partners, staff and donors for their continued support of SFI's strategy to develop scalable and sustainable business models for the development of agriculture in India.

S Baskar Reddy
Executive Director
Syngenta Foundation India

EXECUTIVE SUMMARY

In 2015-16, Syngenta Foundation India shifted gears rapidly and launched the Phase III strategy in India. The objective of Phase III is larger-scale impact. The approach is to develop 'enablers' in various locations. SFI intends to introduce enablers in sectors such as financial solutions (including insurance), ICT and mobile computing, irrigation solutions, agro-processing and farm machinery. Phase III focuses on developing business models for small and marginal farmers, and creating enabling mechanisms for sustainable development which will last beyond SFI's involvement in the regions.

The first of the business models launched by SFI for Phase III was the 'Agri-Entrepreneur' (AE) model, in which a rural youth is trained to support 150-250 farmers in a cluster of 4-5 villages. This person acts as a one-stop resource provider for the agricultural needs of small and marginal farmers. 57 AEs are operational in 5 states, providing advice, agriculture inputs, and credit & marketing services to 9917 small farmers.

During 2015-16, SFI also pioneered an interesting credit delivery model in partnership with the IDBI bank. In this model the AE is engaged as a business correspondent (BC) to the bank, ensuring that farmers supported by the AE have access to short term crop loans. These loans are granted on the condition that at least 60% of the sum borrowed is used to purchase agri inputs at the AE shop, thereby eliminating the misuse of credit for non-agricultural purposes. About 1000 farmers were provided with loans totaling INR 26 million during 2015-16.

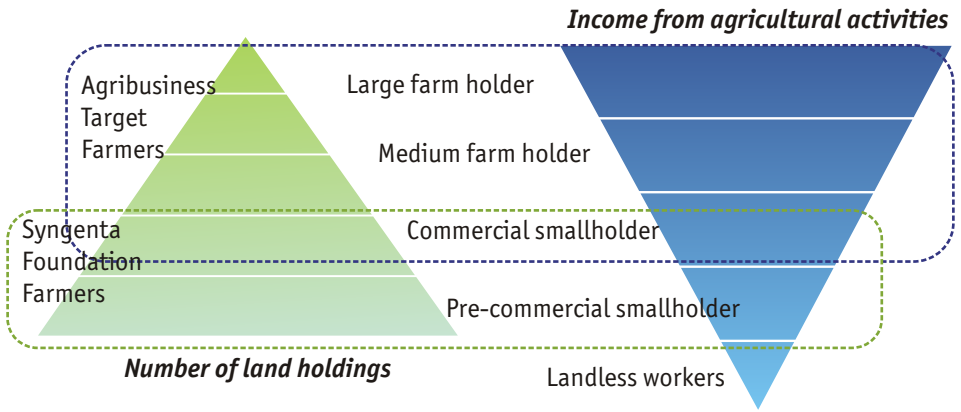
SFI also ventured into the development of irrigation infrastructure for farmers' groups. SFI enabled these groups to obtain credit from the IDBI bank for irrigation infrastructure development (lift irrigation & drip irrigation). A unique credit product for irrigation infrastructure was developed, in which farmers' groups repay loans from the profit generated by increased yields due to irrigation.

In Rajasthan SFI introduced the weather insurance product pioneered by the Syngenta Foundation for Sustainable Agriculture in Kenya. This product is known as 'replanting guarantee', and reimburses the cost of a bag of seed if the crop fails due to inadequate rainfall. It is the first insurance product of its kind for small farmers in India, and is specifically designed to mitigate the risks of deficit rainfall during the germination stages of the crop.

INTRODUCTION

Syngenta Foundation India (SFI) was established in October 2005 as an independent not-for-profit organization under section 25 of the companies act. SFI's mission was to have small and marginal farmers participate in agricultural development by facilitating access to improved seeds, inputs and knowledge of appropriate agronomic practices. The main objective was to educate small and marginal farmers about the latest developments suited to their local needs and ultimately improve their income.

Who we are and What we do



Evolution of SFI

Syngenta Foundation India has completed 10 years of operation in India. The journey can be categorized into three distinct phases. The first phase was from 2005 to 2009, where the focus was on extension-driven agricultural projects in disadvantaged regions.

This involved propagating new technologies including high-performing seeds, improved agronomic practices and control of pests, diseases and weeds.

Special techniques such as SRI (System of Rice Intensification), mechanization in rice, and raising seedlings in poly-houses were introduced. Phase I created valuable opportunities for SFI to try out new ideas and achieve first successes. SFI then moved into Phase II (2009-2013), as it was evident that better productivity alone does not necessarily translate into increased farmer incomes: good links to markets are also required.

Phase II focused on linkages to markets and technical advice to farmers. The motto of this new phase of MLE was "produce together and sell together". The essential features of this approach included linking vegetable producers' groups with markets through fewer intermediaries. Producers' groups were supported by intelligent marketing techniques, for example using mobile phones to track daily wholesale prices. The groups were allowed to choose their leaders and were empowered to carry out their own business transactions profitably, i.e. dispatching truckloads of produce to the market offering the best price on a given day. Considerable income gains were recorded in the

process. For instance, a small producer in Jawhar would previously earn Rs 10,000 net per annum from finger millet and rice. After the introduction of SFI's collective production and marketing of high-value vegetables, the same farmer could earn an additional Rs 25,000 to 30,000.

Current Approach: 2014 onwards

Buoyed by the success and strong basis of these phases, SFI shifted gears rapidly and launched Phase III in 2014. The objective of Phase III is impact on a larger scale. The core task remains unchanged: create value for farmers, help modernize agriculture and the food system, and provide an intelligent catalyst. The approach for Phase III is to develop 'enablers', and to replicate this process in different locations. SFI intends to introduce enablers in sectors such as financial solutions (including insurance), ICT and mobile computing, irrigation solutions, agro-processing and farm machinery. Phase III is focused on developing business models for small and marginal farmers in the regions, and creating enabling mechanisms for sustainable development which will persist after SFI is no longer active in the region.

Most of the business models are based on leveraging agriculture finance as a tool to improve agricultural development. Business models developed by SFI will be explained in detail in the subsequent chapters of this annual report.

AGRI-ENTREPRENEUR MODEL:

Scalable and Sustainable Solution for Agriculture Development

The Agri-Entrepreneur model is the flagship initiative of Phase III of the foundation, and attempts to integrate several enablers. It is a decentralized model based on empowering rural youth to play a transformational role in agriculture development. The AE model creates employment for young people in rural areas, and also fosters regional agriculture development by increasing the income of farmers.

The Model

An Agri-Entrepreneur works with 200-300 farmers in a cluster of 4-5 villages and acts as a one-stop resource provider for the agricultural needs of small and marginal farmers. Agri-Entrepreneurs perform four critical functions: creating better quality inputs, providing knowledge and crop advice, linking farmers to markets, and facilitating credit. As a result of linkages with the IDBI bank created since October 2014, AEs act as business correspondents for banks and facilitate agri-credit for small and marginal farmers in 3 states.

Agri-Entrepreneur models have been tried in the past in India. Most AEs in the market are typically input dealers, who are engaged in indiscriminately selling agri-inputs, which in many cases are spurious inputs. The AE model has not been successful in bringing about any major transformation in agriculture in India. AEs promoted by SFI are involved in various activities from seeds to markets, and the model ensures that farmers' incomes increase. SFI and partner NGOs monitor AEs closely, and will discontinue IDBI financial support if an AE is found to participate in activities not supported by SFI.

Differentiation between SFI AEs and other AEs

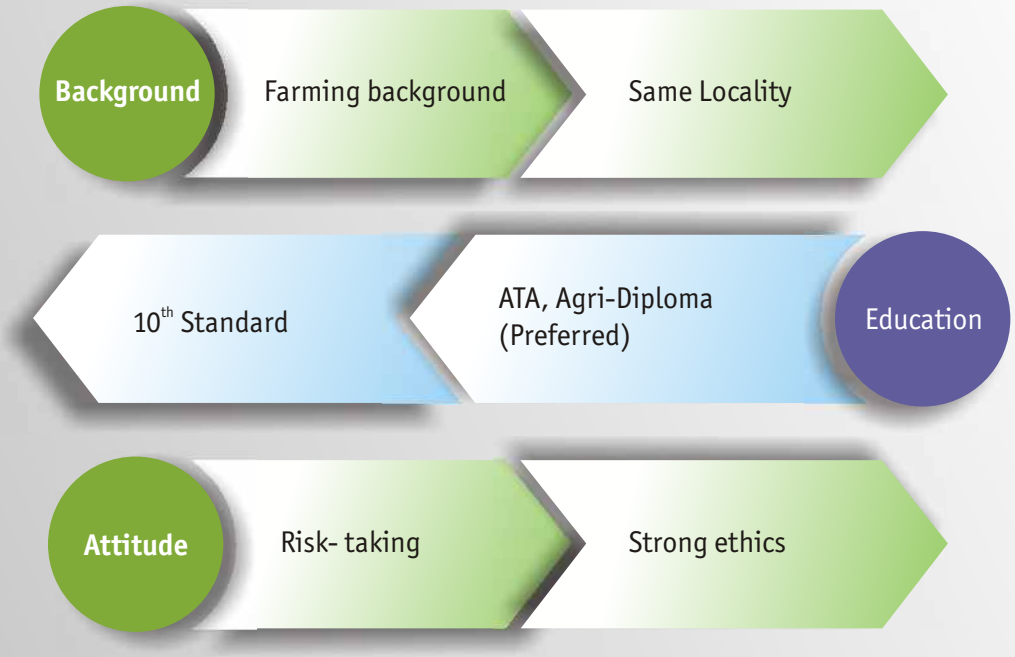
SFI's Agri-Entrepreneur	Other Agri-Entrepreneurs
Market creation is the main objective	Market displacement happens
Decentralized model (rural youth)	May not be the case
Works on buying capacity through credit	Capitalizes on existing buying capacity
Skill development of local villagers	Academically skilled at a higher level
Reproducible business model	Growth by scaling-up for individual entrepreneurs
Customized for under-developed markets	Mostly concentrated in developed markets

AE Responsibilities

As Agri-Entrepreneurs are supported by SFI, AEs should consider their activities as a social enterprise and help farmers at every stage in the value chain. AEs will be procuring inputs at a reduced price (due to bulk purchasing), so they should pass on some discount to farmers. Similarly, when AEs facilitate the sale of agricultural produce by linking with farmers, they should charge minimal transaction fees. Entrepreneurs must adhere strictly to the quality standards set by SFI. SFI and its partner NGOs have recommended certain inputs suitable for specific project areas, and AEs should only deal in these recommended inputs. AEs should act as a source of correct information for farmers. They should provide guidance on crop agronomy, crop protection, proper harvesting, grading, sorting, packaging and produce marketing.

Agri-Entrepreneur Selection

AEs are selected from the classes of rural young people who complete an Agriculture Technology Assistant Training course (ATA training). This course is a 45-day residential program which focuses on developing skills in local crops, agronomy and other technical subjects. Usually 25-30 young people attend these courses, which are held at a training center. During the course they are carefully observed by the instructors, who select 5-7 candidates to become SFI-supported AEs. The following criteria guide the selection process:



Training of Agri Entrepreneurs

After undergoing 45 days of ATA training, the selected candidates attend a 15-day Core AE training course covering the basic aspects of agri-business management.

A year later AEs undergo refresher training, which includes diagnostic exercises and revision of important license and regulatory procedures. On-the-job Agronomy and Extension training is conducted by SFI/NGO Project officers throughout the year. It is mandatory for every Agri-Entrepreneur to attend monthly training sessions conducted by SFI's local project staff.

Status of AE created 2015-16

SFI created the first contingent of AEs in October 2014 in the states of Maharashtra, Madhya Pradesh and Odisha. In the last 18 months, 57 AEs have been established and are serving around 10,000 farmers.

About 25 AEs are enjoying considerable success, and are able to earn 1-4 Lakh per annum.

Table 1 below shows the status of AEs across different states and the number of farmers, total credit facilitated and total value of input transactions

Table 1: Status of AEs in different states and credit facilitated from IDBI Bank

Project	AE's	Farmers Credit	Credit Sanction (INR)	Credit Disbursed (INR)	Input Renewal (INR)	Total Transactions (INR)	Credit Disbursed (INR)
Kalahandi (OR)	16	5,096	11,413,500	11,413,500	6,900,000	15,727,472	18,313,500
Rayagada (OR)	8	1,600	*	*	*	*	*
Jawhar (MH)	14	920	6,468,995	3,200,001	0	3,094,136	3,200,001
Wada (MH)	3	300	*	*	*	*	*
Kesla (MP)	7	950	1,000,000	405,000	0	3,435,366	405,000
Vizag (AP)	9	450	2,017,000	2,017,000	*	0	2,017,000
Bankura (WB)	0	390	1,660,000	1,660,000	*	*	1,660,000
Purulia (WB)	0	211	750,000	750,000	*	*	*
Total	57	9,917	23,309,495	19,445,501	6,900,000	22,256,974	25,595,501

* Data not available

AGRI-CREDIT MODEL:
Financial inclusion of Farmers

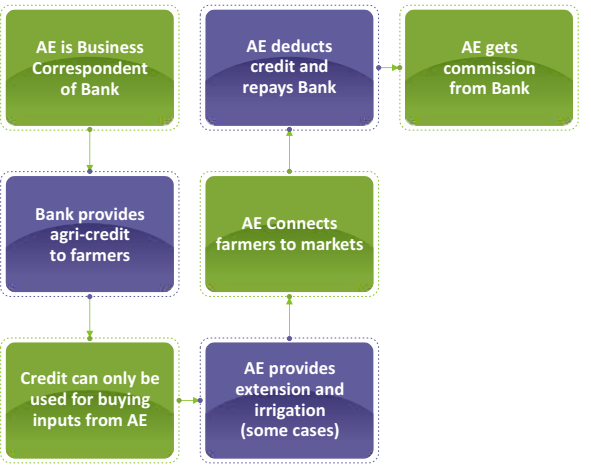
Whilst SFI's Phase II focused on linking farmers to markets, Phase III aims to develop business models, primarily by facilitating agriculture credit. The key to piloting, testing and scaling-up of these business models is agriculture finance and credit linkages to small farmers.

SFI signed a MoU with the IDBI bank in July 2014 to facilitate agri credit to small and marginal farmers in all SFI projects. The main objective of this partnership was to ensure that small farmers were provided with input loans to undertake high value farming such as vegetables and seed production.

In the AE model, AEs act as IDBI business correspondents and facilitate loans to the farmers they represent. AEs prepare and process loan documents for farmers. Interest rates for loans provided to farmers range from 4% to 7%, which is at least 20% less than the rates offered by money lenders.

SFI does not provide collateral or any other guarantees for loans disbursed by the bank. The IDBI provides loans based on trust and faith in the project system created by SFI. One major innovation in the loan disbursal mechanism is the condition that at least 60% of the loan must be used to purchase agri inputs at an AE shop. This measure is intended to prevent bank loan misuse.

The process of credit facilitation is explained below.



By the end of 2015-16, nearly 1000 farmers had been provided with 2.6 crore INR of credit. Loans were granted for a wide range of purposes, such as purchasing agri inputs, irrigation and marketing support.

IRRIGATION INFRASTRUCTURE DEVELOPMENT

Agriculture credit and irrigation are two important factors that influence a farmer's decision to cultivate high value crops. Most often, monsoon dependent farmers take one good Kharif crop and keep their land fallow in the Rabi season, during which they migrate to cities and work as labourers. Most of these farmers would prefer to cultivate in the Rabi season as well if they had access to irrigation.

In the areas where SFI is active, it has created an entire support system (Agri-Entrepreneurs, inputs, credit and markets) during the first two phases. The only missing link in the value chain is irrigation. Consequently, in the third phase SFI has chosen to create irrigation infrastructure for farmers. Knowing the immense value of this asset, farmers were willing to pay for it on an instalment basis. Five irrigation projects have been commissioned in Jawhar.

Business Model

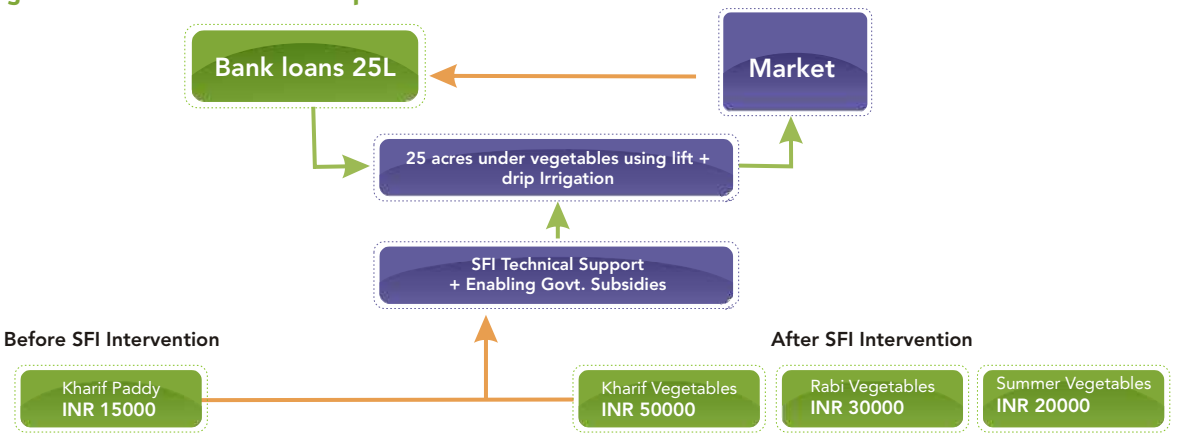
SFI enables farmers' groups to obtain credit from the IDBI bank to develop irrigation infrastructure (lift and drip irrigation) in their villages. Each farmer contributes 40% of the additional profit generated by the Rabi crop to repay the loan.

This arrangement allows farmers to pay for the irrigation infrastructure over a period of three years.

Support provided by SFI

- Developing a market-led extension system and ensuring that farmers receive reasonable profits from the cultivation of high-value vegetables.
- Anchoring Agri-Entrepreneurs who will serve the farmers' groups requiring irrigation infrastructure. Agri-Entrepreneurs act as the liaison between the IDBI Bank and the farmers' groups.
- Identifying turn-key service providers who will design, develop and maintain the irrigation infrastructure.
- Identifying a private investor or IDBI bank to fund the irrigation infrastructure.
- SFI also enables farmers to access government subsidies.

Irrigation Infrastructure Development



SFI has so far carried out 5 irrigation projects, as outlined below in the table 2

Table 2: Irrigation Projects in Jawhar

Sr. No	Village Name	Total Farmers	Irrigation Area in Acres	Total Cost in INR Million	Type of Irrigation/ Source	Crops Cultivated
1	Khadadipada	11	5	0.65	Drip/ Bore	Cucumber, Bitter Gourd, Chilli, Tomato
2	Mendichapada	11	5.7	0.49	Lift and Drip/ River	
3	Ambyachapada	8	4.4	0.71	Lift and Drip/ River	
4	Pimpalpada	11	5	0.36	Drip/Well	
5	Borichagoda	40	26	3.0	Lift and Drip/ River	
	Total	81	46.1	5.21		

Impact

The irrigation infrastructure allows farmers to harvest a second crop during the year, thereby increasing their income. In some cases, farmers were also able to harvest a third crop during the summer season. As a result of this business model, SFI was able to increase the annual income of farmers from INR 15,000 (Kharif only) to INR 100,000 (all three seasons Kharif / Rabi / Summer).

INSURANCE INITIATIVES

Farmers in the rain-fed areas of India depend on monsoons for their crops, and are subject to severe risks during the entire crop cycle. The risk of germination failure as a result of a dry spell immediately after sowing is high. There are currently no insurance products in India which address this specific risk. SFI's insurance initiative is called "Replanting Guarantee". This insurance product provides farmers with another consignment of seeds if germination failure occurs. The insurance premium is bundled with the seed cost, and hence sold with the seeds. Two major advantages of seed insurance are: (a) the premium is low (due to limited cover) (b) in cases of loss payout is immediate, allowing the farmer to buy further seeds.

How it works

This insurance product works seamlessly using mobile technology, and incurs almost zero transaction costs for insurance issuance and claims processing. The procedure is as follows:

- Seed companies participating in the Replanting Guarantee system are provided with unique identity cards showing an alphanumeric code, product information, quantity and cost. These identity cards are placed inside the bags/packets of seeds.
- Farmers approach their input dealer and buy seed bags with embedded insurance. The input dealer explains how to register for insurance.
- On the day of planting, farmers open the seed bag in the field and find a unique card inside. Following the instructions given on the card, they call the telephone number specified. The customer care service then calls back to take details such as name, unique code, village and mobile number, and subsequently initiates insurance cover.
- Farmers are then linked to the automatic weather station closest to their village.
- Data from the automatic weather stations is used to ascertain if germination has failed. If so, the claim is processed and payout is made. Farmers receive an SMS informing them of payout, and money is transferred to their account.

Pilot Project in Rajasthan

This pilot project was undertaken in the Bassi block of the Chittorgarh District of Rajasthan. Syngenta hybrid maize variety NK-30 was selected for the project, and nearly 6000 acres of maize were insured.

Product Design

The insurance product was designed based on inputs from various seed companies and agronomists. They helped us to identify the correct triggers of germination failure due to dry spells, and the critical stages required to develop a good product. Replanting Guarantee is a weather insurance product with rainfall as the main measurable parameter. Farmers are eligible for claim payout if a rainfall deficit occurs during the germination period. There were two product windows:

- Product 1: June 15 to June 30 – This product came into effect after a minimum of 22 mm rainfall. If the cumulative rainfall during the period was less than 36 mm, payout was made
- Product 2: July 1 to July 15 – This product came into effect after a minimum of 15 mm rainfall. If the cumulative rainfall during the period was less than 36 mm, payout was made

The premiums for these insurance products were based on historical weather data for each weather station/location, usually about 8-10% of the sum insured. In this pilot the cost of maize seeds per acre was INR 1400, premiums were thus INR 137/acre.

Partners and Responsibilities

- Syngenta Foundation India: Design, development and implementation of the product
- ICICI Lombard: Issuing the policy and underwriter of the insurance
- Amicus Brokers: Design of the product in close coordination with agronomists of seed companies
- NCML: Automatic weather station data provider

- RML: Call center services for registering farmers
- Syngenta India Limited: Embedding insurance products into their agri input bags and last mile delivery channel

Implementation and Results

Of the seven weather stations that were installed in the pilot project, one weather station indicated a rainfall deficit during the product period which resulted in payout to farmers. The 482 farmers who were registered with the Kanera weather station received payouts and ICICI Lombard transferred the money to their bank accounts.

AGRICULTURE SUBSIDIES STUDY

By implementing smallholder projects on the ground with its partners, the Syngenta Foundation has acquired first-hand knowledge and experience of the subsidies (or lack thereof) to farmers in project areas. For instance, in Kalahandi, Orissa, SFI and its partner NGO Karrtabya promote hybrid rice seed production by small and marginal farmers on 750 acres. Although the state government provides a subsidy of Rs 8000 per acre for hybrid rice seed production, without the efforts of Karrtabya and SFI it would have been difficult for the farmers to claim this support. This raises the important question of ease of access by farmers to subsidies and other support programs.

This is a major concern in Indian agriculture. It affects millions of farmers and many public, private and not-for-profit organizations working in the field of agriculture. To address this problem, the Syngenta Foundation commissioned the study "Supporting Indian Farms the Smart Way: Rationalizing Subsidies and Investments for faster, inclusive and Sustainable Growth". The study was undertaken by ICRIER, an autonomous, policy-oriented, not-for-profit economic policy think tank. ICRIER's main focus is to enhance the knowledge content of policy making. It carries out analytical research targeted at informing India's policymakers and improving the interface to the global economy.

Major Findings of the study:

- The modelling exercise reveals that the marginal returns in terms of number of people brought out of poverty by investments in research and development, roads, education, and irrigation outweigh the benefits of subsidies in power, fertilizers and irrigation.
- The greatest impact can be achieved by investments in agricultural R&D, followed by roads, education and irrigation.
- Agricultural R&D can help to reduce the number of rural poor by 251 for every one million Indian rupees.
- Investment in rural roads can reduce this number by 163, education and irrigation by 59 and 57 .
- Among the subsidies, irrigation has no significant impact and thus no effect on poverty reduction. Power subsidies (46) and fertilizer subsidies (11) follow irrigation in reducing the number of rural poor.
- Although irrigation subsidies have little significant effect on agricultural growth and poverty reduction, fertilizer subsidies have the lowest impact of all the investments.

Power subsidies cause problems by promoting unsustainable ground water extraction, and consequently should be reduced.

- Given their higher marginal returns investments are clearly the best instruments, but the nature of investments and institutional frameworks is crucial to achieving maximum benefits.
- In addition to prioritizing investment, a reform of the institutional frameworks and the creation of new institutions is essential. The restructuring of the National Agricultural Research System (NARS) to become a professional and demand-driven research entity is a prerequisite for efficient investments in research and development.
- Investments in irrigation in the current context cannot be confined to creation and utilization: micro-irrigation devices should be installed to produce more 'crop per drop' and reduce overexploitation, and the legal framework should impose stricter enforcement and encourage user participation.

  Service charges should be levied to build and develop new administration for the potentially 26 million hectares under irrigation.
- Skill levels should be improved by vocational education and innovative modules from the National Skill Development Corporation, in addition to formal schooling for farmers to gain the skills required to modernize agriculture.
- Power subsidies should be replaced by suitable investments in quality dedicated power supply lines for agriculture throughout the day. The sooner the extremely negative consequences of power subsidies on already diminishing water resources are recognized, the better. Investments in efficient pump units and solar powered pumps should be made wherever possible.
- Fertilizer subsidies should be paid directly to farmers using advances in information and communication technologies and national identification numbers (Aadhar). An upper limit on the number of bags a single farmer can buy should be imposed. Financial leverage with rationalized subsidies should be used to make way for new institutions such as insurance, machine hire centres, deficiency payments etc.
- The revival of Indian agriculture in general calls for prioritizing investments, rationalizing subsidies and investing in the changing requirements of modern agriculture. The bottom line is increased investments and the transformation of support systems from price support to income. The overall level of support must be increased: it now hovers at the very low level of 6-8%, compared to the staggering 19% of our close and comparable neighbour China.

PROJECTS

Market Led Extension and Seed Production Projects

E.1 Bankura and Purulia Projects (West Bengal): – NGO Partners: Shamayita Math and Nanritam

Seed production activities were promoted by SFI in both Bankura and Purulia. Tables 3 & 4 show the seed production details of the Bankura and Purulia projects respectively. All the seed production initiatives have assured buy-back arrangements with various seed companies. Ten seed companies such as WBSSC, Syngenta, Indo American Hybrid Seeds, Nunhems, Bayer, NSC, Bankim Seeds, Pallisiri, Debagiri and Advanta participated in this initiative in both locations.

Table 3: Seed Production in Bankura

Crop Seed	Total Farmers	Approx. Area (acre)	Total Production	Approx. Value (INR)
Certified Paddy	286	344	350 MT	90 Lakh
T.L. Paddy	42	26	50 MT	14 Lakh
Certified Pulses	65	27	5 MT	3 Lakh
Hybrid Tomato	46	11	435 Kg.	41 Lakh
Hybrid Bitter Gourd	28	8.5	280 Kg.	2.8 Lakh
OP Vegetables	45	8.2	650 Kg.	1 Lakh
Total	**512**	**424.7**		**151.8 Lakh**

Table 4: Seed Production in Purulia

Crop Seed	No. of Farmers	Area (Acres)	Production Quantity (KG)	Approx. Value (INR)
Certified Paddy	21	15	20000	5.2 Lakh
TL Paddy	39	31	40000	5.9 Lakh
Hybrid Tomato	2	0.5	23	2.0 Lakh
Hybrid Bitter Gourd	20	5	37	0.4 Lakh
Hybrid Okra	20	5	190	0.8 Lakh
Total	**102**	**56.5**		**14.3 Lakh**

E.2 Kalahandi Project (Odisha): NGO Partner– KARRTABYA

i. **Market-Led Extension**: Sixty Self Help Groups consisting of 780 farmers started commercial vegetable cultivation on 397 acres. The total production was 4764 MT.

- Collective marketing was undertaken in 46.82% of total production (2230.9 MT, value 2.14 crore INR).
- Besides direct benefits from collective marketing, additional benefits such as correct produce weight and avoidance of drudgery and time loss in transportation to market were particularly helpful to women.
- Our initiative was appreciated and supported by local department officials, who also helped in disseminating information to non-project farmers.

ii. **Hybrid Rice Seed Production Technology**: This technology opened up avenues for high income among small farmers in Kalahandi. A total of 372 farmers took up Hybrid Seed Production on 657.9 acres during Rabi 2015. The total value to the farmers was INR 2.77 crore.

- Three seed producer companies viz. Syngenta, Bayer and Seed work International were associated with the program. The average seed production of all companies was quite impressive.

- Farmers who cultivated for Syngenta harvested an average yield of 13.26quintal/ac (highest being 21 Qtl/ac). The average gross income was INR 35,000* (including income from male seeds & Govt. incentive).

- Nirmal Seeds Private Limited also initiated OP seed production on approximately 500 Acres.

- This initiative has created tremendous interest amongst both farmers and seed production companies. An increasing number of farmers are showing strong interest in participation. Seed production companies are also pleased, due to good yields and quality production parameters. We intend to take up seed production on 1500 to 2000 acres in the ensuing season. In addition to hybrid seed production, we also intend to establish a modern "Seed Processing Plant" using the PPP model to strengthen seed multiplication of the OP rice variety.

E.3 Vizag Project (Andhra Pradesh): NGO Partner – Bhagavatula Charitable Trust

SFI worked in Vizag during 2015-16 in 40 villages, with 650 farmers growing paddy, sugarcane and pulses. SFI organized training programs on AE- related topics for about 3 weeks. Each AE was attached to IDBI as a business facilitator to provide KCC linkages to farmers. SFI helped farmers to obtain pesticide and seed licenses from the AP Government Department of Agriculture.

All 9 AEs obtained licenses and have opened Agri retail shops.

E.4 Jawhar Project (Maharashtra): NGO Partner - BAIF MITTRA and Pragati Pratishthan - Palghar District

Market-Led Extension: SFI has been working in 180 villages distributed in 17 clusters (over five blocks of the districts Jawhar, Mokhada, Vikramgadh, Dahanu & Talasari). For Kharif 2011 our target was 1510 families cultivating vegetables on 403 acres. The major Kharif vegetables cultivated were Bitter Gourd, Cucumber, Okra, Chilli, Ridge Gourd and Red Pumpkin. About 50% of the area was under Bitter Gourd (over 190 acres). Previously this figure was about 70%, but we are trying to help farmers diversify from Bitter Gourd to other vegetables to minimize market risk. If the monsoon is delayed by over 20 days in Jawhar, it may affect the total area under vegetable cultivation. However, to date the total rainfall has averaged 515 mm, which is favourable in comparison to earlier years.

During the 2016 Rabi season a total of 778 farmers cultivated vegetables on 376 acres. The main Rabi crops were: Tomato, Cucumber, Chilli, Cow Pea, Cluster Bean and Onion. The total production was 1581 MT, of which 70% was collectively sent to various wholesale

*A normal farmer would get a maximum of Rs 10,000/-acre from a commercial rice crop.

markets. Despite the improved yield farmers could not obtain good prices for their produce, due to large-scale supply from other regions to the wholesale markets. This affected the farmers' overall profits.

E.5 Wada Project (Maharashtra): NGO Partners - Pragati Pratisthan Wada block, Palghar District (Maharashtra)

Market-Led Extension: In the Rabi season, SFI identified 29 villages in 3 clusters. A total of 339 families participated, and the total area under high value cultivation was 222 acres. Cow Pea (71 acres) was the dominant crop. Total production was 1550 MT, of which 91% was collectively sent to markets such as Vashi, Palghar, Surat and Bhivandi.

During the Kharif season we worked with 500 farmers and brought 125 acres under vegetable cultivation. The main Kharif crops were: Bitter Gourd, Okra, Bottle Gourd, Ridge Gourd, Cucumber, Chilli and Cow Pea. The total targeted production was 625 MT.

FINANCIAL REPORT 2015-16

SYNGENTA FOUNDATION INDIA
Balance Sheet as at 31 March 2016

	Notes	31 March 2016 Rs.'000	31 March 2015 Rs.'000
Equity and Liabilities			
Reserves and Surplus	3	14,016	10,036
		14,016	**10,036**
Current Liabilities			
Short-term borrowings	4	3,266	3,266
Trade payables	5		
- outstanding dues to micro enterprises and small enterprises (Refer Note 15)		-	-
- outstanding dues of creditors other than micro enterprises and small enterprises		1,012	3,660
Other current liabilities	6	263	46
		4,541	**6,972**
TOTAL		**18,557**	**17,008**
Assets			
Current Assets			
Cash and bank balances	7	17,582	16,342
Short-term loans and advances	8	732	209
Other current assets	9	243	457
		18,557	**17,008**
TOTAL		**18,557**	**17,008**
Summary of Significant accounting policies	1-2		
See accompanying notes to the financial statements	3-17		

The accompanying notes are an integral part of the financial statements.

As per our report of even date

For B S R & Associates LLP
ICAI Firm registration no.: 116231W/W- 100024
Chartered Accountants

Shiraz Vastani
Partner
Membership No. 103334

Place: Pune
Date: 12 July 2016

For and on behalf of the Board of Directors of
Syngenta Foundation India

Prakash K.Apte
Director

S.Baskar Reddy
Chief Functionary and
Whole time Director

Place: Pune
Date: 12 July 2016

SYNGENTA FOUNDATION INDIA

Statement of Income and Expenditure for the period ended 31 March 2016

	Notes	31 March 2016 Rs.'000	31 March 2015 Rs.'000
Income			
Grants and Donations		75,221	90,515
Interest Income		521	643
Total Income		**75,742**	**91,158**
Expenses			
Project expenses	10	47,437	65,467
Operating and other expenses	11	24,325	20,963
Total Expenses		**71,762**	**86,430**
Excess of Income over Expenditure		**3,980**	**4,728**
Summary of Significant accounting policies	1-2		
See accompanying notes to the financial statements	3-17		

The accompanying notes are an integral part of the financial statements.

As per our report of even date

For B S R & Associates LLP
ICAI Firm registration no.: 116231W/W- 100024
Chartered Accountants

Shiraz Vastani
Partner
Membership No. 103334

Place: Pune
Date: 12 July 2016

For and on behalf of the Board of Directors of
Syngenta Foundation India

Prakash K.Apte
Director

S.Baskar Reddy
Chief Functionary and
Whole time Director

Place: Pune
Date: 12 July 2016

PROJECTS AT A GLANCE

AE keeping records of collective marketing

Hybrid Rice Seed Production in Kalahandi

AE Inauguration Shop in Wada Project

Farmer's Meeting

Grading of Tomatoes before Marketing

Healthy Seedlings in Polyhouse

Tomato Plot from village Borichaghoda in Jawhar Project

Collective Marketing in Wada Project

syngenta foundation India

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