Minding the GAP = Improved Yields and Income

In Nigeria, smallholder farmers lose between 5% and 40% of their crops annually to pests and diseases\(^1\). Inaccessibility to quality seeds and fertilisers continues to impede agricultural productivity and affect food security. In addition, rural smallholder farmers often face difficulties with access to crop protection products (CPPs) which can make the difference in growing healthy crops. To increase farmers’ access to quality inputs while educating farmers on their proper handling and usage, in 2014 Propcom Mai-karfi partnered with global agricultural input firm Syngenta to establish a ‘bottom of the pyramid’\(^2\) marketing strategy. This strategy was designed to increase retail outlets and strengthen the link between agro-dealers and farmers in the two pilot states of Kano and Katsina. In addition to increasing farmers’ access to inputs, the strategy also had a training component on good agricultural practices (GAP) and safe use of chemicals, using farm demonstration plots and events. Retailers were present at these demonstration events to sell products required by farmers at different stages of crop production.

Syngenta has since branded 22 retail outlets in Kano and Katsina states, and 4,700 farmers have been trained on GAP at 172 farm demonstration events. Thirty six lead farmers each established demo plots on 0.125ha using best practices, and on another 0.125ha used their regular farming practices. With the 2014 season having ended and sales concluded, lead farmers and training participants tell stories of increased yields, healthier crops, and an improved quality of life.

**Hinde Mohammed - Lead Farmer**

Hinde Mohammed is a vital contributor to the finances of her family of 8. Having farmed for 30 years in her community of Zangon Buhari in Kano State, Hinde had formed a pattern of crop rotation and planting methods for maize, rice, soybean, cowpea, groundnut, pepper, onion, and tomato. Every year, she knew the maximum yield her farm could achieve when all elements were in her favour. During the 2014/2015 dry season, Hinde was nominated to be a lead farmer by a Syngenta agronomist. She was keen to learn to improve her farm business. Hinde received inputs and technical support to establish a tomato demonstration plot and held demonstration events on her farm. Hinde says that she learnt about nursery establishment, transplanting, spacing, fertiliser application and how to apply agrochemicals. At harvest Hinde harvested 7 baskets of tomatoes (about 420kg) from her best practices plot, and 5 baskets (about 300kg) from the plot where she employed her traditional practices. This was great news for her. It was even better news when she sold the produce from her best practices plot at NGN 4,000 (£16)/basket, in contrast to NGN 2,500 (£10)/basket for those from her traditionally farmed plot. The disparity, she says, was because the fruits from her best practices plot were “bigger and fresher.”

Hinde took forward this new technique to the 2014/2015 dry season and her maize farm. As a result, she harvested 11 bags of maize from 0.25ha, the same farm size which had yielded 7.5 bags of maize earlier in the year; even with the added benefit of rains. Hinde is now a mentor in her community. Farmers of both sexes come to her for farm-related advice; a rare sight given the cultural context. They also give her money to buy quality inputs for them which has inspired Hinde’s new venture idea. By the end of 2015 she plans to open two stores before the next dry season, one store to sell fertilisers and the other for agrochemicals. Eventually I will also like to buy a tractor for my farm and for leasing” - Hinde Mohammed.


\(^2\) People at the bottom of the economic pyramid; the poorest socio-economic group.
“Before, I was farming using traditional methods, but now that I have learnt new ways of protecting my farm, and a new method of planting which improves my yield, why would I stop it? In the future, I will only buy quality inputs for my farm from reliable retailers, and also ensure that more women know about the farm demonstrations and participate”.

Shu’aibu Mohammed - Demonstration Attendee

Shu’aibu Mohammed attended Syngenta demonstration events held close to his community of Gidan Kaji. He actively participated at all four events even though the demonstration crop was sweet pepper which he did not cultivate at the time. Shu’aibu took what he learnt and diligently applied it to his watermelon farm. He says that the most vital lesson he adopted was proper fertiliser application and spacing. Shaibu also noticed that when he used agrochemicals from the open market, he needed to spray many more times than with Syngenta products: 12 times to Syngenta’s 7. With the former, he also needed more chemical each time.

Due to the application of improved techniques learnt, Shu’aibu harvested more fruit than he had previously, and they were bigger and healthier. He got about 1,200 watermelons from 0.7 ha of land, the same plot size where he got 700 watermelons the prior season. He also earned NGN 65,000 (£260) in revenue, almost twice his prior NGN 35,000 (£140).

“The demo that I attended has motivated me to go into sweet pepper production; though I never intended to. I will also apply these new practices to my other crops”. Shu’aibu plans to cultivate 1ha of watermelon and 1ha of sweet pepper during the 2015 dry season.

Ishaqa Abdullahi - Lead Farmer, Turned Agrodealer

In May 2014 Ishaqa Abdullahi served as a lead farmer in his community of Karfi in Kano State. Alongside hundreds of other farmers, Ishaqa learnt best practices on rice cultivation. He says that the techniques that he learnt were different from how he had planted in the past, and particularly appreciated learning about seed incubation. Prior to this, Ishaqa’s sole source of income was from farming, rotationally cultivating rice, maize and vegetables between the wet and dry seasons. At harvest during the 2014 wet season, Ishaqa harvested 15 bags of rice from his best practices plot and 10 bags of rice from his traditional farming plot. While he cultivated his demonstration plots, Ishaqa was also farming other crops and applied the new techniques which he learnt.

He harvested 48 bags of maize from his farm, up from his 30 bags the previous season, and from his rice farm harvested 92 bags, 12 bags more than the season before. His revenue increased by NGN 50,000 (£200) with maize, and NGN 40,000 (£160) with rice.

Months later, Ishaqa is still profiting and growing from this success. Ishaqa saw a market opportunity when his local Syngenta dealer stopped supplying products regularly, thus necessitating that he and other farmers travel a greater distance to purchase inputs. In November 2014 he opened an agrodealer store with NGN 70,000 (£280) from his farming profits. He went on to cultivate 0.25 ha of maize during the 2014/2015 dry season with some profit from his shop. “Every part of my life has changed. I am better able to finance my home life and farm. I cannot now imagine what my life would be like without this shop and the added profits from my farm”.

“Before I used to broadcast my fertiliser anyhow but now I know to plant the fertiliser close to my crop which makes it more effective and also reduces wastage” - Ishaqa